GTLT - ____9___

(10-36)-17N-2E Sunoco Energy Development Corporation (Sandoval County)

3-77-5; 3-77-8; 3-77-9; 3-77-11; 3-77-10; 3-77-13; 3-77-15; 3-77-14 & 3-77-16

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NEW MEXICO OIL CONSERVATION COMMISSION SEP 18 18:0 P. O. Box 2088, Santa Fe 87501

L. . . .

SUNDRY NOT	ICES	AND	REPOR'	ΓS
	ON			
CENTHERMAL	DEC	OLID (SEC MEL	

5. Indicate Type of Lease

Operator	,]	GEOTHERMAL	RESOURCES WELLS	State Fee X
Land Office				5.a State Lease No.
Do Not Use This Form for Pro For Permit –" (Form G-101) for	posals to or Such P	Drill or to Deepen or Plug Back Proposals.)	to a Different Reservoir. Use "Application	
1. Type of well Geothern	nal Produ	icer Temp. Observatio	on X	7. Unit Agreement Name · ·
Low-Tem	np Therma	al 🔲 Injection/Disposa		NONE
2. Name of Operator				8. Farm or Lease Name
SUNOCO) ENER	GY DEVELOPMENT CORPO	RATION	SAN DIEGO GRANT
3. Address of Operator				9. Well No.
12700	PARK	CENTRAL PL., STE. 15	00, DALLAS, TX_ 75251	5
4. Location of Well			· .	10. Field and Pool, or Wildcat
Unit Letter , j	1900	Feet From The EAS	T Line and 1900 Feet From	NONE
The SLine,	Section _	10 Township	17N 2E NMPM.	
		15. Elevation (Show w 5960		12. County SANDOVAL
16.	Check	Appropriate Box To Indicat	e Nature of Notice, Report or Other Da	ata
NOTICE (OF INTEN	NTION TO:	SUBSEQUE	NT REPORT OF:
PERFORM REMEDIAL WORK TEMPORARILY ABANDON			REMEDIAL WORK COMMENCE DRILLING OPNS.	ALTERING CASING
PULL OR ALTER CASING		CHANGE PLANS	CASING TEST AND CEMENT JOE	3
			OTHER	
OTHER.				

This hole location was dropped from our drilling program and will not be drilled in the near future.

Carl Ulusa SENIOR PETROLEUM GEOLOGIST	
I hereby certify that the information above is true and complete to the best of my knowledge and belief. PROJECT SUPERVISOR SIGNED TITLE GEOTHERMAL SERVICES, INC. DATE	9/10/78

CONDITIONS OF APPROVAL, IF ANY:

en na	• •			MWE !		Form G-101 Adopted 10/1/
NO. OF COPIES RECEIVED	NEI	W MEXICO OIL CONSERV	VATION COMMISSION	ີ ຄົນຕະເໜ		•
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	1 1	ICATION FOR PERMI			STATE	
Operator /	ORPL	JG BACKGEOTHERN	MAL RESOURCES WE	ELL	5.a State Le	ase No.
_and Office		•	•		mm	mmmm
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			ction/Disposal	<i></i>		Lease Name
Low-1et	np Thermal 🔲	mje	Ction/Disposar		San	<u>Diego Grant</u>
2. Name of Operator SUNOCO ENERGY DI	EVELOPMENT CO	ORPORATION '	·		9. Well No. 3 -	-7 7 ⊇5
3. Address of Operator	,		mv. ==0=1		10. Field and	d Pool, or Wildcat
12700 Park Centi	al Pl., Sui	te 1500, Dalla	as, TX 75251		<u>Non</u> ε	<u> </u>
. Location of Well 本本 UNIT LET	TER ${f J}$ -1LOCA	red <u>1900</u> FEET FRO	OM THE East	FINE .		
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ND 1900 FEET FROM	THE S LINE OF	SEC. 10 TWP. 17	N RGE. 2E	NMPM	7//////	
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		projected		777777	Sandova	1 /////////////////////////////////////
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			500 ft.	<u>unkno</u>	wn	rotary
1. Elevations (Show whether DF, 5960			B. Drilling Contractor cothermal Ser	vices	June	Date Work will start 2 15, 1977
	F	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
_			lling Progra	peratur m"	e Gradi	ent
**- Al	l section li	ines projected				
	well or go	ond will be \$1 eothermal obsess of being fi as soon as av	rvation well led, and a bo	bond. ond num re oper	The bo ber wil	nd is in l be commence. VALID S UNLESS
	•	\mathscr{F}		FXPIRE	S 0/ 11	
ABOVE SPACE DESCRIBE PRO	POSED PROGRAM: If m, if any.	proposal is to deepen or p	olug back, give data on pi	resent product	ive zone and	proposed new productive
rehiertify that the information	above is true and comp	plete to the best of my kno	Geothei		_	
od XIVI	mes.	Title Chief Geol	<u>ogist,Service</u>	es,Inc.	ne Apri	1 26, 1977

TITLE SENIOR PETROLEUM GEOLOGIST

DATE 5/13/77

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Sunoco Energy Development Corp. San Diego Grant 3-77-5 Section Township County Sandoval 17N Actual Footage Location of Well: feet from the projected F line and line(projected) 1900 1.900_ Dedicated Acreage: Producing Formation Ground Level Elev. 5960. 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 rovalty). 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? □ No If answer is "yes," type of consolidation_ 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 contained herein is true and complete to Hole #3-77-5 to be located: the best of my knowledge and belief. M11/4NW1/4SE1/4, sec. 10, T. 17N, R. 2E Name Steve Quiett Position Chief Geologist Geothermal Services, Inc. April 26, 1977 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. 1370 1600 1980 2310 2140 2000 1500 1000 500



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



- 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.
 - 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 \underline{MUST} NOT 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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Land Office	•	

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

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SUNDRY NOTICES AND REPORTS

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. s. g. s	 		ON		: .	5. Indicate Type	
Operator	7	GEOTHERM	AL RES	OURCES WELLS	_ '	State	Fee X
Land Office						5.a State Lease N	· ·
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Low-Te	emp Thermal	Injection/Disp	osal [NONE	
2. Name of Operator						8. Farm or Lease	Name
SUNO!	CO ENERG	Y DEVELOPMENT COR	PORATI	ON		SAN DIEG	O GRANT
3. Address of Operator						9. Well No.	
1270	O PARK C	ENTRAL PL., STE.	1500,	DALLAS, TX 7525	1	. ,	8
4. Location of Well						10. Field and Poo	ol, or Wildcat
Unit Letter0	500	Feet From TheS	0UTH	_Line and2300	Feet From	NONE	
	ne, Section	14Township_	17N	2E Range			
		15. Elevation (Show	60			12. County SANDOVAL	
16.	Check	Appropriate Box To Indi	cate Nati	are of Notice, Report of	r Other Da	ta	
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OTHER			_ 🗆 📗				
17. Describe Proposed or co		rations (Clearly state all p	ertinent d	etails, and give pertinene	t dates, inch	iding estimated dat	te of starting any
proposed work) SEE RU	LE 203.						•

This hole location was dropped from our drilling program and will

not be drilled in the near future.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. TITLE SENIOR PETROLEUM GEOLOGIST

CONDITIONS OF APPROVAL, IF ANY:

					THE PARTY OF	Adopted 10/1,
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Operator /		G BACKGEOTHERN			5.a State Le	ase No.
Land Office		•	·	•	777777	
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SUNOCO ENERGY D	EVELOPMENT CO	RPORATION				7-8
3. Address of Operator		1500 Delle	as, TX 75251			d Pool, or Wildcat
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21. Elevations (Show whether DF			B. Drilling Contractor	. •	22. Approx	x. Date Work will start
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	P	ROPOSED CASING AND	CEMENT PROGRAM			•
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ne. Give blowout preventer progra	m, if any.					
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GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

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<u>inoco En</u>	7-90-			Corp.	- 1		ego Gran	<u>t</u>	3-77-8
Letter	Section	n 14	Township	L7N	Rang	2 E	County	andoval	•
ual Footage Lo-		Well:		-					
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und Level Elev. 6960'		Producing For	mation		Pool	Mana	•		Dedicated Acreage:
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		one lease of on, ùnitizatio			ledicated	to the we	ll, have the ir	terests of all	owners been consolidated
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		list the own	ners and t	ract descripti	ons which	n have act	ually been con	nsolidated. (U	se reverse side of this for
necessary.)		, , .	3 , , , ,				Laan ayasa	lidated (by	an munitization unitiza
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	1					i ·		1	certify that the well locati
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- 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.
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- 7. Run pipe immediate the learning of electric logs or reaching T.D. (if · pged). is
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 - tellen to the property services.

 Steel piperson he will not adhere. b.
 - Steel pips on the proof of drilling fluid temperature of the start of C. С.
 - When pipe is deg and must be 6" to 12"/
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 threed as the same are the control of the control d.
 - Fill pipe with LEAS while (we contain with early as susoline MUST NOT е. be used) of the tall prope Do not seal.
 - Set paper. The property widge down open annulus at least ly the belief, wand level. Fill annulus f. with cemeral of to best of cap on pipe.
- Clean up location with GHI 8.
- 9. Any excavated gitg on symps was be backfilled to conform to the original toppy papers
- When temperature surveys are completed, fill pipe with cement from 10'/3m is rep of prop, till excavation to original ground to appropriate property as possible to drigingly condition. 10:

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0. s. g. s	1		ON	5. Indicate Type of Lease
Operator	1	GEOTHERM	AL RESOURCES WELLS	State Fee X
Land Office				5.a State Lease No.
			•	
Do Not Use This Form for Pr For Permit —" (Form G-101)			ck to a Different Reservoir. Use "Application	
1. Type of well Geothe	ermal P	roducer Temp. Observa	ation X	7. Unit Agreement Name
Low-Te	emp Th	nermal 🔲 Injection/Disp	osal 🗀	NONE.
2. Name of Operator				8. Farm or Lease Name
SUNOCO ENERGY DI	EVEL	OPMENT CORPORATION		SAN DIEGO GRANT
3. Address of Operator				9. Well No.
12700 PARK CENTI	RAL I	PLACE, SUITE 1500, DAI	LLAS, TX 75251	9 ·
4. Location of Well				10. Field and Pool, or Wildcat .
Unit Letter H		850 Feet From The	EAST Line and 1800 Feet From	NONE
		ionTownship _	17N 2E NMPM.	
		15. Elevation (Show	whether DF, RT, GR, etc.) 5800	12. County SANDOVAL
16.	C	heck Appropriate Box To Indi	cate Nature of Notice, Report or Other Da	nta
NOTICE	OF I	NTENTION TO:	SUBSEQUE	NT REPORT OF:
PERFORM REMEDIAL WOR	ĸ □	PLUG AND ABANDON	REMEDIAL WORK	ALTERING CASING
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PULL OR ALTER CASING		CHANGE PLANS	CASING TEST AND CEMENT JOB	
		,	OTHER	
OTHER				
17. Describe Proposed or co			ertinent details, and give pertinenet dates, incl	uding estimated date of starting any

This hole location was dropped from our drilling program and will not be drilled in the near future.

I hereby certify that the information above is true and complete to the SIGNED.	e best of my knowledge and belief. PROJECT SUPERVISOR GEOTHERMAL SERVICES, INC.	9/10/78
APPROVED BY Carl Ulway TITLE	SENIOR PETROLEUM GEOLOGIST	DATE 9/20/78

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b. Type of Well Geother.	mal Producer 🔲		np Observation 🛣		8. Farm or L	Lease Name	
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		projected			12. County Sandova		
			Proposed Depth 1	9A. Formatio	u /////////	20. Rotary or C.T.	777.
			500 ft.	unkno		rotary	
1. Elevations (Show whether DF)	RT etc. 1 21 A Vinc	l & Status Plug. Bond 21	B. Drilling Contractor	unkno		c. Date Work will sto	
=000		note "A" Ge	eothermal Ser	vices	June	. 15, 1977°	111
	P	ROPOSED CASING AND	CEMENT PROGRAM	· · · · · · · · · · · · · · · · · · ·		••	
'SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF		EST. TOP	
5-1/8."	3/4"	1.14 lbs.	500'	1.	5 .	6" BGL	
				<u> </u>			
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·							
			•				
Progra	am- See attad	ched "Standard	Shallow Temp	oeratur	e Gradi	ent	
. 6		` Hole Dri	lling Program	n 11			
** A I	ll contion li	ines projected					
- A	II SECUTOR II	rues brolected	<u>.</u>				

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 commence.

not Drilled - 12/12

APPROVAL VALID FOR 90 DAYS UNLESS DRILLING COMMENCED.

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

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

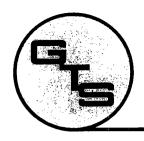
Title Chief Geologist, Services, Inc Bate April 26, 1977

(This space for State Use)

SENIOR PETROLEUM GEOLOGIST

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Operator 3-77-9 San Diego Grant Sunoco Energy Development Corp. Section Township County Sandoval 17N Actual Footage Location of Well: ine(projected) 850 feet from the projected E line and feet from the Dedicated Acreage: Producing Formation 58001 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? ☐ Yes ☐ No If answer is "yes," type of consolidation. 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 contained herein is true and complete to Hole #3-77-9 to be located: the best of my knowledge and belief. NW1/4SE1/4NE1/4, sec.21, T.17N, R.2E Name Steve Quiett Position Chief Geologist Geothermal Services, Inc. April 26, 1977 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 1980 2310 2640 2000 1:00 1000 :.00



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



- 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.
 - 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 for 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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Operator		OR PLU	JG BACKGEOTHER	MAL RESOURCES WE	LL PO	5.a State Le	ase No.	
Land Office		•				,,,,,,,,	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
BLM	. <i>I</i>		•					
la. Type of Work	Drill X		Deepen` .	Plug Back	,	_	ement Name	
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b. Type of Well	Low-Temp Therm			ection/Disposal		8. Faim of L	lease Name	
	Com-temb Literin	aı					<u>Diego Gra</u>	mt
2. Name of Operator						9. Well No.	٠.	
	ERGY DEVELOP	MENT CO	ORPORATION			3-77		
3. Address of Operator				myr scoel		10. Field and	Pool, or Wildcat	
<u> 12700 Park</u>	<u>: Central Pl</u>	., Sui 1	te 1500, Dalla	as, TX 75251	·	$Non\epsilon$	i i i i i i i i i i i i i i i i i i i 	~~~
4. Location of Well	UNIT LETTER	M LOCAT	red <u>600</u> feet fr	OM THE West	LINE			/////
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AND 1100 FE	ET FROM THE S	LINE OF	SEC. 23 TWP. 171	RGE. 2E	NMPM	7777777	77 / / / / / / / / / / / / / / / / / /	7777
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				500 ft.	unkno	um	rotary	
21. Elevations (Show)	whether DF, RT, etc.)	21A Kind	d & Status Plug. Bond 2:		·	1	. Date Work will	ciari
693			note "A" Ge	eothermal Ser	vices	June	15,1977	Ž
				• .				
		P	ROPOSED CASING AND	CEMENT PROGRAM			12	
SIZE OF HOLE	SIZE OF	CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF	CEMENT	EST. TOP	,
5-1/8"		4"	1.14 lbs.	500'	1.		6" BGL	
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•	Note A- Typ	e of bo	ond will be \$1	0.000 multin	le-well	low-te	emperature	ž
	Note A- Typ Wel	l or ge	eothermal obse	ervation well	bond.	The bo	nd is in	•
			s of being fi					
	fur	nished	as soon as av	ailable befor	re oper	ations	commence.	,
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1	Not drilled - 1	2/12	•			APPROVA	VS LINLESS	
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	•				, I		OMMENCED	
			1			8/1	1/77	· .

N ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive is true and complete to the best of my knowledge and belief.

Geothermal

Title Chief Geologist, Services, Inc. Pare April 26, 1977

(This space for State Use)

FPROVED BY Carl Ulvog

TITLE SENIOR PETROLEUM GEOLOGIST

DATE 5/13/77

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. 3-77-11 San Diego Grant Sunoco Energy Development Corp. County Township Section Sandoval 17N Actual Footage Location of Well: Iine(projected) feet from the projected W 1100 600 line and feet from the S Dedicated Acreage: Ground Level Elev. Producing Formation 6950' 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_ □ 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 contained herein is true and complete to Hole #3-77-11 to be located: the best of my knowledge and belief. NW1/4SW1/4SW1/4, sec.23, T.17N, R.2E Steve Quiett Positio**n** Chief Geologist Geothermal Services, Inc. April 26, 1977 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 1985 2315 2000 1500 1000 500



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- 1. Coordinate "Special Stipulations" or other unusual requirements with the Project Geologist prior to set-up and spud.
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 - 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.
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 - e. Fill pipe with CLEAN WATER (water that is oily or contains solvents such as gasoline $\frac{\text{MUST}}{\text{NOT}}$ 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.
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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.

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Operator	1		
Land Office			

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

SUNDRY NOT	ICES A	AND	REPO	RTS	
	ON		•		
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Operator	1		GEOTHERMAL RE		State 🗀	Fee X
Land Office					5.a State Lease N	o.
		l	,	·		
Do Not Use This Form For Permit —" (Form G			Drill or to Deepen or Plug Back to a I Proposals.)	Different Reservoir. Use "Application		
1. Type of well G	Seothermal	Prod	ucer Temp. Observation	[X]	7. Unit Agreemer	it Name ··
ر	.ow-Temp	Therm	nal Injection/Disposal		NONE ·	
2. Name of Operator					8. Farm or Lease	Name '
SHNOCO	ENERCV	DEV	ELOPMENT CORPORATION		SAN DIEGO	GRANT
3. Address of Operator	LINE ING.	UL.V.	LEGI-TENT CONFORM TON		9. Well No.	
12700 PAI	RK CENT	RAL	PLACE, SUITE 1500, DALI	LAS. TX 75251	11	
4. Location of Well					10. Field and Poo	ol, or Wildcat
Unit Letter	6	00	WEST	1100 Line andFeet From	NONE	
SOUTH			23 17N.	. 2ENMPM.		
			15. Elevation (Show whethe	-	12. County SANDOVAL	
16.	(Checl	c Appropriate Box To Indicate Na	iture of Notice, Report or Other Dat		•
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PERFORM REMEDIAL	WORK [PLUG AND ABANDON	REMEDIAL WORK	ALTERII	NG CASING
TEMPORARILY ABAN	DON []		COMMENCE DRILLING OPNS.	PLUG &	ABANDONMENT
PULL OR ALTER CAS	ing [CHANGE PLANS	CASING TEST AND CEMENT JOB		
V				OTHER		
OTHER						
17. Describe Proposed	or comple	ted C	perations (Clearly state all pertinent	details, and give pertinenet dates, inclu	ding estimated dat	e of starting any
proposed work! SEI	C DILL C A	. 2				

This hole location was dropped from our drilling program and will not be drilled in the near future.

signed South that the information above is true and complete-to the signed signed that the information above is true and complete-to the signed signe	PROJECT SUPERVISOR	DATE9-10-78
APPROVED BY Carl Wood TITLE	SENIOR PETROLEUM GEOLOGIST	DATE 9/20/78

NO. OF COPIES RECEIVED			NEW MEXICO OIL CONSERVATION COMMISSION.	7 - 7 4
DISTRIBUTION			P. O. Box 2088, Santa Fe 87501	P 18 1510
File	/	V	· ·	2 .
N. M. B. M.	1		SUNDRY NOTICES AND REPORTS	
G. S	1		ON .	5. Indicate Type of Lease
Operator	/		GEOTHERMAL RESOURCES WELLS	State Fee X
Land Office	<u> </u>			5.a State Lease No.
				minnmi
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	ucer Temp. Observation	7. Unit Agreement Name
Low-T	emp	Therm	nal Injection/Disposal	NONE ·
2. Name of Operator				8. Farm or Lease Name
SUNOCO ENE	RGY	DEV	ELOPMENT CORPORATION	SAN DIEGO GRANT
3. Address of Operator	0 E 117		DIAGE CUITE IECO DALLAG EV TECT	9. Well No.
	LENI	RAL	PLACE, SUITE 1500, DALLAS, TX 75251	10. Field and Pool, or Wildcat
4. Location of Well Unit Letter K	250	00	Feet From The WEST Line and 1600 Feet From	NONE
S			24 178 25	
TheLir	ne, Se	ction .	24 17N. 2E. NMPM	
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				12. County
	777	7777	6100' (G.L.)	SANDOVAL ()
16.	(Check	Appropriate Box To Indicate Nature of Notice, Report or Other D	ata
NOTICE	OF_	INTE	NTION TO: SUBSEQU	ENT REPORT OF:
PERFORM REMEDIAL WOR	rk L	_	PLUG AND ABANDON REMEDIAL WORK	ALTERING CASING
TEMPORARILY ABANDON	Ĺ		COMMENCE DRILLING OPNS.	PLUG & ABANDONMENT L
PULL OR ALTER CASING	L		CHANGE PLANS XX CASING TEST AND CEMENT JOI	в Ц
			OTHER	
OTHER				
<u> </u>		***		
17. Describe Proposed or co	omple	ted O	perations (Clearly state all pertinent details, and give pertinenet dates, inc	luding estimated date of starting any
proposed work) SEE RU	LE 20)3.		
•				'
Thi	s h	ole	location was dropped from our drilling program	and will not
be	dri	lled	d in the near future.	
			•	
			,	
				•
hereby certify that the	infor	nation	above is true and complete to the best of my knowledge and belief.	
		//	PROJECT SUPERVISOR	9-10-78
SIGNED / WIT	14	//	MULLAMOSTITLE GEOTHERMAL SERVICES, INC.	DATE
	4-			
//,	1		דוום מודים	0/2-12
APPROVED BY	a	X	Llung TITLE SENIOR PETROLEUM GEOLOGIST	DATE 9/20/18

CONDITIONS OF APPROVAL, IF ANY:

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Operator	1					AAL RESOURCES		- 1	5.a State Le	ase No.	
Land Office									 	~~~~~~	·····
BLM			,		. •		• •				
1a. Type of Work	Drill 🛚			Deepen 🗆		Plug Back			7. Unit Agr		lame
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.,	Low-Ten	p Thermal			Inje	ction/Disposal	□ .		Çom	Dica	o Cnont
2. Name of Operator									9. Well No.	Dreg	<u>go Grant</u>
SUNOCO ENE	ERGY DE	VELOPMEN	NT CO	RPORATI	ON				3-7	7-10	
3. Address of Operato			~	7.000	D 11	mv rr) 	.	10. Field an	•	r Wildcat
12700 Park	Centr	al Pl.,	Suit	e 1500,	Dalla	as, TX 752			<u> </u>	3	mm
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						•					
AND 1600 FE	ET FROM	THE S LI	NE OF S	SEC. 24 T	WP. 171	RGE. 2	1777	VMPM \	12. County	77777	
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						500 ft.		unknöv	vn	ro	tary
21. Elevations (Show)	whether DF,	RT, etc.) 21	A. Kind	& Status Plug	Bond 21	B. Drilling Contract	lor	·	22. Appro	x. Date W	Vork will start
61	00 (GL)	see.	note "A	<u>.'' G</u> €	othermal S	Serv:	ices	June	<u>e 15,</u>	1977
		·	PI	POPOSED CA	SING AND	CEMENT PROGRA	M				
SIZE OF HOLI	E	SIZE OF CAS	ING	WEIGHT PE	R FOOT	SETTING DEPTI	н	SACKS OF	CEMENT		EST. TOP
5-1/8."		3/4"		1.14	lbs.	500'		1.3	5	6"	BGL
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tereby certify that the			d d comn	lete to the bes	st of my kn	owledge and belief					
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This is	space for Sta	te Use)		•							

SENIOR PETROLEUM GEOLOGIST

DATE 5/13/77

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Operator 3-77-10 Sunoco Energy Development Corp. <u>San Diego Grant</u> County Section Township Sandoval Actual Footage Location of Well: feet from the projected w line and line(projected) 1600 feet from the Dedicated Acreage: Producing Formation Ground Level Elev. 6100' 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? ☐ Yes ☐ No If answer is "yes," type of consolidation_ 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 contained herein is true and complete to Hole #3-77-10 to be located: the best of my knowly-dge and belief. NE1/4NE1/4SW1/4, sec.24, T.17N, R.2E <u>Steve Quiett</u> Position Chief Geologist Geothermal Services, Inc <u>April 26, 1977</u> 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. 95 1370 1650 1980 2310 2640

2000

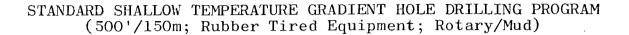
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7860 CONVOY COURT, SAN DIEGO, CALIFORNIA 92111 • (714) 565-4712



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- 2. Choose location and orientation of drilling rig so as to minimize surface disturbance.
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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.
 - 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.

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G. S	1	
Operator	1	
Land Office		
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Line, Section

25

SOUTH

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

12. County

SANDOVA

1/				
	2			
SUNDRY NOTICES AND REPORTS				
	-5. Indicate Type of Lease			
GEOTHERMAL RESOURCES WELLS	State Fee X			
	5.a State Lease No.			
Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application Proposals.)				
ucer Temp. Observation 🛣	7. Unit Agreement Name			
nal Injection/Disposal	NONE			
	8. Farm or Lease Name			
FIOPMENT CORPORATION	SAN DIEGO GRANT			
LLUI-II-LII-L-UVIXI UVATI VII	9. Well No.			
PLACE, SUITE 1500, DALLAS, TX 75251	13			
	10. Field and Pool, or Wildcat			
Feet From The EAST Line and 2000 Feet Fro	NONE			
	SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application Proposals." Jude Temp. Observation IX Injection/Disposal III ELOPMENT CORPORATION PLACE, SUITE 1500, DALLAS, TX 75251			

16. Check	Appropriate Box To Ind	icate Na	ture of Notice, Report or Other Data	1	, 	
NOTICE OF INTEN	ITION TO:		SUBSEQUEN	T REP	ORT OF:	
PERFORM REMEDIAL WORK	PLUG AND ABANDON		REMEDIAL WORK		ALTERING CASING	
TEMPORARILY ABANDON			COMMENCE DRILLING OPNS.		PLUG & ABANDONMENT	
PULL OR ALTER CASING	CHANGE PLANS	X	CASING TEST AND CEMENT JOB			
			OTUED .			Г

_Township ___17N.

6025' (G.L.)

15. Elevation (Show whether DF, RT, GR, etc.)

17. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work) SEE RULE 203.

> This hole location was dropped from our drilling program and will not be drilled in the near future.

SIGNED Certify) ////	M.	PROJECT SUPERVISOR GEOTHERMAL SERVICES, INC.	9-10-78
APPROVED BY	Carl Ulu	og TITLE	SENIOR PETROLEUM GEOLOGIST	DATE 9/20/78

			2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m	1223 3 1 1 3	si mil	•	
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DISTRIBUTION		P. O. Box 2088, Sar	5.3.3.2		, N. I		
File	- 		MA MA	Y -3 19/7	5 dodicate	Type of Lease	
N.M. M.							X
	APPL	ICATION FOR PERMI	T TO DRILL DEEPEN	FRAVILOU !	STATE L		, <u>, , , , , , , , , , , , , , , , , , </u>
Operator	OR PLI	JG BACKGEOTHERN	MAL RESOURCES WE	Salata Fo			
Land Office			, .		THITT.		77
•		,	•				///
	V1 .		0, 0, 0		7 Unit Agr	ecment Name	777
1a. Type of Work Drill	Δ	Deepen .	Plug Back 🗀		Non		
b. Type of Well Geother	mal Producer 🔲	Ter	mp Observation 🛣	}		Lease Name	
• •	mp Thermal 🔲	Inje	ction/Disposal 🗆	*	C	Diama Cmani	4
				<u>-</u>	9. Well No.	<u>Diego Gran</u>	<u>د</u>
2. Name of Operator SUNOCO ENERGY D	EVELOPMENT C	ORPORATION		ĺ	3-77	7-13	
3. Address of Operator	EA EPOI LIETAT C	Old Oldalion				d Pool, or Wildcat	
12700 Park Cent	ral Dl Sui	te 1500. Dalla	as. TX 75251	1	None		
* *					111111	mmmil	77
UNIT LET	TER J_LOCA	ted 2200 feet fr	OM THE LAST	LINE			///
AND 2000 FEET FROM	THE S LINE OF	SEC. 25 TWP. 17N	I RGE. 2 E	NMPM			///
		Wester /	niminn	177777	12. County		1:/2
		XX			Sandov	. ///////	///
/////////////////////////////////////	+++++++++	++++++++++++++++++++++++++++++++++++++	++++++++	++++++	THILL	HHHH	17,
							//.
	/////////////////////////////////////	HHHHH	Proposed Depth 1	9A. Formation	, ////////	20. Rotary or C.T.	77.
			500 ft.	unkno	ώn	rotary	
21. Elevations (Show whether DF	, RT, eic.) 21A. Kind	d & Status Plug. Bond 21	B. Drilling Contractor		1	x. Date Work will star	<u> </u>
000			othermal Ser	vices	Jun	e 15, 1977	
	F	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.		6" BGL	
			· · · · · · · · · · · · · · · · · · ·				
Progra	om Soo atta	ched "Standard	Shallow Tem	neratur	- Grad	ient	
11081	an- see acta		lling Progra		, araa.		
			0 0				
**- A.	ll section li	ines projected					
Note A	A- Type of bo	ond will be \$1	0,000 multip.	le-well	low-te	emperature	
	well or ge	eothermal obse	rvation well	bond.	The bo	ond is in	
	the proces	ss of being fi	led, and a bo	ond numl	oer wil	ll be	
		as soon as av	ailable befor	re opera	ations	commence.	
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ı		· 3*			90 DAYS (
	•			D RILLIN	G COMM	LINCED	
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e. Give blowout preventer progra	m, if any.	p. oposat to to deepen of p	Doen, give data on pr	- DIODUCTI	ve zone and	Proposed usa broad	.tive
creby certify that the information	above is true and com	olete to the best of my kno		_			
	/	a) : 0 a 3	Geother		A	1 26, 1977	
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PPPOVED BY Carl Ulvog.

· (This space for State Use)

TITLE SENIOR PETROLEUM GEOLOGIST

DATE 5/13/77

Form G-102 Adopted 10/1/2

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 3-77-13 Sunoco Energy Development Corp. San Diego Grant County Section Township Sandoval 25 Actual Footage Location of Well: line(projected) 2000 2200 feet from the projected E line and feet from the Dedicated Acreage: Ground Level Elev. Producing Formation 6025' 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? ☐ No If answer is "yes," type of consolidation. 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 #3-77-13 to be located: contained herein is true and complete to NW1/4NW1/4SE1/4, sec.25, T.17N, R.2E the best of my knowledge and belief. <u>Steve Quiett</u> Position Chief Geologist Geothermal Services, Inc. April 26, 1977 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 1960 2310 2640 1100 1000 5.00



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



- 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 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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File	11	
N. M. B. M.	1	SUNDRY NOTICES AND REPORTS
G. S	1	ON
Operator	1	GEOTHERMAL RESOURCES WELLS
Land Office		
		· · · · · · · · · · · · · · · · · · ·
For Permit —" (Form G		V)

12700 PARK CENTRAL PLACE, SUITE 1500, DALLAS, TX 75251

SUNOCO ENERGY DEVELOPMENT CORPORATION

be drilled in the near future.

3. Address of Operator

SEP 18 1973

NONE

9. Well No.

15

8. Farm or Lease Name SAN DIEGO GRANT

5. Indicate Type o	f Lease
State 🗆	Fee X
-5.a State Lease No	

4. Location of Well					•		10. Fie	eld and Pool, or Wildcat	
Unit Letter F	1400	Feet From The	WEST	Line and	2200	_Feet From	NON	E	
		33Township							
		15. Elevation (Sho 5660' (G.		*	etc.)		12. Co SAND		
16.	Check A	Appropriate Box To Ind	licate Nat	ure of Notic	e, Report	or Other Da	ta		
NOTI	CE OF INTENTI	ION TO:				SUBSEQUE	NT REPO	ORT OF:	
PERFORM REMEDIAL W		PLUG AND ABANDON			L WORK	NG OPNS.		ALTERING CASING PLUG & ABANDONMEN	л П
PULL OR ALTER CASING	a \square	CHANGE PLANS	X	CASING T	EST AND	EMENT JOB		•	
				OTHER	₹				
								, ·	
17. Describe Proposed or	completed Oper	ations (Clearly state all p	pertinent d	details, and gi	ve pertinene	et dates, inclu	ding est	imated date of starting an	y

This hole location was dropped from our drilling program and will not

PROJECT SUPERVISOR
SIGNED Carl Way TILLE SENIOR PETROLEUM GEOLOGIST

DATE 9/20/78

CONDITIONS OF APPROVAL, IF ANY:

proposed work) SEE RULE 203.

						_	پروستان وا د وستاه د استامه است	A		
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N. M.						. 11.30		STATE [_
U.S.J.S.	- 1		APPLICAT	ION FOR P	ERMIT	TO DRIVE DEEPE	NZYATION CO	5.a State Le	ase No.	FEE 🏃
Operator Land Office			OR PLUG BA	ACKGEOT	THERM.	AL RESOURCES	anta Fe		•	
BLM	<u>-</u>	<u> </u>						111111	MITTI	TITT.
PLIN	•			•	•	·				
la. Type of Work	Drill 🔯]	Deene	en 🗆		Plug Back 🔲		7. Unit Agre	eement Name	77777
	_		20075		_		•	None	.	
b. Type of Well		nal Producer				p Observation 🛣		8. Farm or l	Lease Name	•
	Low-Tem	p Thermal			Injec	tion/Disposal 🗆		San	Diego C	<u>irant</u>
2. Name of Operator			, , , , , , , , , , , , , , , , , , , ,					9. Well No.		
SUNOCO ENE		VELOPME	NT CORPO	RATION				3-77		
3. Address of Operator		1 101	· C	1500 D		~ TV' 7595) 1	i	d Pool, or Wild	dcat
	*					s, TX 7525		None	mmi	77777
4. Location of Well	UNIT LETT	ER F	_LOCATED_	L 400 FE	ET FRO	м тне West	LINE			
AND 2200 FE	ET FROM	FUE %7 (NE OF 550 F	7.00 TWD		TAL DOT AT	DUDADNA			
AND 2200 FE	111111	111111	NE OF SEC.	17777	1111	N RGE. 2E	NMPM	12. County		+++++
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	77777		111111	7.7777	17/19.	Proposed Depth	19A. Formatio	n	20. Rotary or	C.T.
					777	500 ft.	unkno	wn	rotar	. y
21. Elevations (Show w						B. Drilling Contractor	•	22. Approx	x. Date Work y	will start
·	660 (GL)	see not	:e "A"	Geo	othermal Se	cvices	June	e 15, 19	211
		•	PROPO	SED CASING	G AND C	EMENT PROGRAM		•	• ,	
SIZE OF HOLE		SIZE OF CAS	SING WEI	GHT PER FO	тос	SETTING DEPTH	SACKS OF	CEMENT	EST.	TOP
5-1/8."		3/4"		1.14 1	bs.	500'	1.		6" BGI	
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	.									
				•			•		•	
	Progra	m- See	attached	l "Stan	dard	Shallow Ter	nperatur	e Gradi	.ent 🕟	
	· .			Hole	Dri	lling Progra	am ''			
	**- Al	l secti	on lines	proje	cted					
						0,000 multip	المسماد	10w_++	mn orati	ıre
	Note A	- Type well	or genth	viii b	obsei	rvation well	bond.	The bo	nd is i	in .
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				P			DRILLING	COMMEN	JED.	٠.
				<i>;</i>		ı	EXPIRES 8	/11/17		
ABOVE SPACE DESC			RAM: If propo	sal is to deer	en or pl	ug back, give data on	present produc	tive zone and	proposed new	v productiv
one. Give blowout preve		^								<del></del>
hereby certify that the i	Information	above is true	d complete to	o the best of	my knov	wledge and belief. Geothe	ermal			
	1/\/	1,183/		Chiof (	Coolo	acound Arist Sorvia	oc Inc	Ans	cil 26	1977

(This space for State Use)

SENIOR PETROLEUM GEOLOGIST

_DATE 5/13/77

Form G-102 Adopted 10/1/1

### GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Operator Lease 3-77-15 Sunoco Energy Development Corp. San Diego Grant County Township Sandoval 2E Actual Footage Location of Well: feet from the projected W ine(projected) 1400 2200 N feet from the Dedicated Acreage: Ground Level Elev. Producing Formation 5660 **'** 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? □ No If answer is "yes," type of consolidation_ 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 contained herein is true and complete to Hole #3-77-15 to be located: the best of my knowledge and belief. SW1/4SE1/4NW1/4, sec. 33, T. 17N, R. 2E Name Steve Quiett Position Chief Geologist Geothermal Services, Inc. April 26, 1977 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. 1.37 651 1370 1650 1980 2310 2640 1500 1000 500



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



- 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.
    - 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 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.

SEP 18 95 1

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

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SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLS

5. Indicate Type of	Lease
State 🗌	Fee X
C - CA-An I area Ma	

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 PLACE, SUITE 1500, DALLAS, TX 75251	14
4. Location of Well	10. Field and Pool, or Wildcat
Unit Letter C 1400 Feet From The WEST Line and 300 Feet From	NONE
The NORTH Line, Section 35 Township 17N. Range 2E. NMPM.	
15. Elevation (Show whether DF, RT, GR, etc.) $6400'  (G.L.)$	SANDOVAL
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 REMEDIAL WORK	☐ ALTERING CASING ☐
TEMPORARILY ABANDON COMMENCE DRILLING OPNS.	☐ PLUG & ABANDONMENT ☐
PULL OR ALTER CASING CHANGE PLANS (X) CASING TEST AND CEMENT JOB	•
OTHER	
OTHER	
17 Describe Proposed or completed Operations (Clearly state all pertinent details and give partinent dates inch	· ·

This hole location was dropped from our drilling program and will not be drilled in the near future.

PROJECT SUPERVISOR
SIGNED Carl Wood TITLE SENIOR PETROLEUM GEOLOGIST

DATE 9-10-78

SENIOR PETROLEUM GEOLOGIST

DATE 9/20/78

proposed work) SEE RULE 203.

Turke		•	The state of the s			Adopted 10/2
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DISTRIBUTION					٠.	
File	1 4		nta rev 87501 MAY - 3	إزار 11		
N.M. M.	<u>'                                    </u>			Mary man		Type of Lease
U.S. 3. /	APPL	ICATION FOR PERMI	T PO DANTE DEEPE	N, Comm.	STATE L	
Operator /	OR PLU	JG BACKGEOTHERN	MAL RESOURCES WI	LL	J.a State L	ease 140.
Land Office					77777	
BLM		•				
1a. Type of Work Drill	<u> </u>	Deepen 🗆	Plug Back 🖸	· · · · · · · · · · · · · · · · · · ·	7. Unit Agr	eement Name
			-		Non	e .
	rmal Producer	•	mp Observation 🛣		8. Farm or	Lease Name
Low-Te	emp Thermal	Inje	ction/Disposal		San	<u>Diego Grant</u>
2. Name of Operator	control of the column of	DDOD A MTON			9. Well No.	Mrs 9 A
SUNOCO ENERGY D	EVELOPMENT CO	DRPORATION				7-14
3. Address of Operator 12700 Park Cent	nal Di Sui	te 1500 Dalla	as. TX 75251			d Pool, or Wildcat
					Non	
UNIT LE-	TTERLOCAT	ED 1400 FEET FR	OM THE _ WES	LINE		
AND 300 FEET FROM	THE N LINE OF	SEC. 35 TWP. 1	7N RGE. 2E	NMPM		
		jected			12. County	
				777777	Sandov	al (////////
			9. Proposed Depth	9A. Formatio	7	20. Rotary or C.T.
			500 ft.	unkno		rotary
21. Elevations (Show whether DI	F, RT, etc.) 21A. Kind	& Status Plug. Bond 21			- <del> </del>	<del></del>
6400		note "A" Ge			Jun	x. Date Work will start e: 15, 1977
	Р	ROPOSED CASING AND	CEMENT PROGRAM			
		1	·	<del></del>		
5-1/8."	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF		6" BGL
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one. Give blowout preventer progr	am, if any.			. caciit product	The Your auc	proposed new productive
hereby certify that the information	h above is true and comp	lete to the best of my kno	owledge and belief. Geothei	rma I		
aned Albert	with	Title Chief Geol			. Apri	1 26, 1977
(This space for S	tate Visal	THE STITE GOOT			1e	
(Into space for S)	iace USE)		anteria centaciót			
PPROVED BY Carl U	luga	SENIOR PETR	OLEUM GEOLOGIST		5/	13/77
DEDITIONS OF APPROVAL, IF	ANY:			0	· · · · · · · · · · · · · · · · · · ·	

### GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Lease Operator 3-77-14 Sunoco Energy Development Corp. San Diego Grant Range County Section Township Sandoval Actual Footage Location of Well: 1400 feet from the projected W line and line(projected) 300 feet from the Dedicated Acreage: Ground Level Elev .. Producing Formation 6400' 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? No If answer is "yes," type of consolidation_ 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 contained herein is true and complete to the best of my knowledge and belief. Hole #3-77-14 to be located: NW1/4NE1/4NW1/4, sec. 35, T. 17N, R. 2E Name <u>Steve Quiett</u> Position Chief Geologist Geothermal Services, Inc April 26, 1977 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. 1370 1650 1980 2310 2640 2000 1500 1000 500



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- 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.
  - 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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NEW MEXICO OIL CONSERVATION COMMISSION

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Operator		GEOTHERM	AL RES	OURCES WELLS		State 🗀	Fee X	J
Land Office						5.a State Lease N	٧٥.	
Do Not Use This Form for P For Permit —" (Form G-101)			ck to a D	offerent Reservoir. Use "Appl	lication			
1. Type of well Geothe	ermal Produc	er Temp. Observ	ation	<b>X</b> 0		7. Unit Agreemen	nt Name · ·	
Low-T	emp Therma	Injection/Disp	osal			NONE		
2. Name of Operator						8. Farm or Lease	Name	
SUNOCO ENE	RGY DEVE	LOPMENT CORPORATION	ΩN			SAN DIEGO	GRANT	
3. Address of Operator			J14			9. Well No.		
12700 PARK (	CENTRAL	PLACE, SUITE 1500	. DALL	AS, TX 75251		16		
4. Location of Well						10. Field and Po	ol, or Wildcat	
Unit Letter N	180	Feet From The	WEST	Line and 200 Fe	et From	NONE		1
The SOUTH Lir	ne Section	36 Township	17N.	Range2E.	имем.			////
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	<i>111111</i>	15. Elevation (Show		DF, RT, GR, etc.)		12. County		111
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16.	Check	Appropriate Box To Indi	cate Nat	ture of Notice, Report or (	Other Dat	SANDOVAL		~~~
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				3117 <u>4.1.</u>				
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17. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work) SEE RULE 203.

> This hole location was dropped from our drilling program and will not be drilled in the near future.

hereby certify that the information above is true and complete to the best of my knowledge and belief. SENIOR PETROLEUM GEOLOGIST CONDITIONS OF APPROVAL, IF ANY:

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DISTRIBUTION		P. O. Box 2088, 9	Santa Fe 875017	فعددها مقيسات كمست	Kanada)	
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N.M. /				3	.    Indicate	Type of Lease
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Operator /	OR PLU	G BACKGEOTHE	RMAL RESOURCES W	ELL 5	State Le	ase No.
Land Office				RVATION CR	·	
BLM				enta Fe		
1a. Type of Work Drill	<u>X</u> ) .	Deepen 🗆	Plug Back	7	. Unit Agre	ement Name
		·	-		None	9
b. Type of Well Geother	mal Producer 🔲		emp Observation 🛣	8	. Farm or 1	ease Name
Low-Ter	np Thermal 🔲	lr	jection/Disposal 🗆		San	Diego Grant
2. Name of Operator				9.	. Well No.	<u> </u>
SUNOCO ENERGY DI	EVELOPMENT CO	ORPORATION		. [	€ <b>3-7</b> 5	<b>7∋16</b> .
3. Address of Operator				10	0. Field and	d Pool, or Wildcat
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hereby certify that the information	above is true and comp	elete to the best of my	knowledge and belief.			
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GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Operator Lease Sunoco Energy Development Corp. San Diego Grant 3 - 77 - 16County Range Section Township Sandoval 2E Actual Footage Location of Well: Ine(projected) 200 feet from the projected W line and 1800 feet from the Dedicated Acreage: Producing Formation 5940' 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? ☐ Yes ☐ No If answer is "yes," type of consolidation_ 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 contained herein is true and complete to Hole #3-77-16 to be located: the best of my knowledge and belief. SW1/4SE1/4SW1/4, sec.36, T.17N, R.2E Name Steve Quiett Position Chief Geologist Company Geothermal Services, Inc April 26, 1977 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 1980 2310 2640 2000 1522 1000 500



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- 1. Coordinate "Special Stipulations" or other unusual requirements with the Project Geologist prior to set-up and spud.
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- 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.
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