P. O. BOX 2219

ZIA ENERGY, INC. PHONE (505) 393-2937

" DIVISION

HOBBS, NEW MEXICO 88241

May 30, 1991

State of New Mexico Energy and Minerals Department Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

> Re: Request for Administrative Approval For Salt Water Disposal Well Located in the SW/4-NE/4 of Sec. 5, T-22-S, R-37-E Lea County, New Mexico

Gentlemen:

Enclosed is various documents to support our request for your Administrative Approval for a salt water disposal well to be located 2310' FNL and 1980' FEL of Section 5, Township 22 South, Range 37 East, Lea County, New Mexico. We are submitting your form C-108 and the data requested by this form.

The data requested by C-108 item III is supplied on two Well Data The proposed SWD well is presently plugged and abandoned. The well was originally drilled by Gulf Oil Corporation in June, 1967 and completed in the middle to lower San Andres for a water supply well and used in their South Penrose Skelly waterflood unit. The waterflood unit was abandoned early in 1985 and this No. 1-WSW was plugged on Februaty 2, 1985, as outlined on the enclosed Plugged Well Data Sheet. A copy of the original C-105, Well Completion Report, is enclosed for you information. The Lane Wells Acoustilog for this well is already in your files. A Well Data Sheet is enclosed showing the proposed completion procedure to re-enter and complete as a water disposal well. All cement and cast iron bridge plugs will be drilled out to the total depth of 5014'. The perforated intervals 4013'-22', 4083'-92', 4134'-46' and 4306'-14' will be squeezed off using enough cement to get a good squeeze. The perforations 4456'-64' and 4902'-10' will be left open for disposal. A set of perforations from 4955' to 4964' and 4990' to 5004' may be added if necessary.

C-108 item V requested a map identifying all wells, leases and operators within two miles of the disposal well. A circle one-half mile in radius has been drawn to identify the Area of Review for the disposal well.

C-108 item VI requested data on all wells within the Area of Review which penetrated the zone of injection. A total of fifteen (15) wells penetrated the San Andres in the Area of Review. A Well Data Sheet has been prepared for each of these wells. It appears that eight (8) wells were drilled into the Grayburg but never penetrated into the San Andres. Well Data Sheets were not prepared for these wells.

C-108 item VII requested several items of information. The beginning daily rate of injection will be approximately 400 BWPD. As additional workovers are completed on producing wells during the next several years, the anticipated maximum daily rate may be 3,500 BWPD. The system will be designed as a closed system. The beginning injection pressure is expected to be a vacuum and maximum injection pressure is expected to be 500 psi. The sources of water to be injected will include water from the Queen, Grayburg, San Andres, Paddock, Blinebry, Tubb and Drinkard formations. Water analyses from the Grayburg, San Andres, Paddock, Blinebry, Tubb and Drinkard formations are enclosed. These analyses indicate no adverse problems due to mixing of the waters. Some calcium carbonate scale may be formed but it would be readily removed by HCL acid.

C-108 item VIII requests several geological data. The San Andres formation is a rather thick, predominately lime formation with some sandy dolomite stringers in the upper 350 feet. Overall the formation is approximately 1,300 feet thick extending from approximately 3780 feet to its base at approximately 5085 feet. The San Andres is oil and gas productive to the East, North and South, with only one well being less than one mile away. This well is the Zia Energy, Inc. Grizzell No. 3, located in the SW/4-SE/4 of Sec. 5, T-22-S, R-37-E. In this area, if the San Andres is productive, it will be within the top 100'-150' of the formation. Below this depth it will be all You will note from the enclosed C-105, this well produced 2,970 BWPD on the initial potential. The San Andres is a strong water drive formation. It is our plan to inject below a depth of 4450', therefore, we will be injecting into a zone which is already all The only known fresh water zones overlying this area occur between the surface and 150 feet. Fresh water is very spotty and not very prolific in this area.

C-108 item IX requests information concerning stimulation. The only stimulation needed would be approximately 1,000 gallons of acid to clean up possible wellbore damage.

For C-108 item X electric logs and well completion reports were submitted when the well was originally drilled in June, 1967.

For C-108 item XI two chemical analyses for fresh water is enclosed. The analysis titled Flowers No. 1 is from a fresh water well located in the SE/4-SW/4 of Sec. 5 and the one titled Henson No. 1 is located in the SE/4-NE/4 of Sec. 5. These samples were obtained on May 15, 1991 and delivered to Unichem International for analysis.

I, Javie There, , president of Zia Energy, Inc., certify that I have examined extensive available geological and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone, which is between 4456' and 5004' and any underground source of drinking water which would be between 100' and 500' from the surface.

C-108 item XIV - Proof of Notice. The surface owner for the disposal well location is Wayne Henson, P. O. Box 605, Eunice, NM. The oil and gas leasehold operators within the Area of Review includes Chevron USA, Inc., P. O. Box 688, Eunice, NM 88231, B. E. C. Corporation, P. O. Box 1392, Midland, TX 79702, and William B. Yarborough, 200 Loraine-Suite 1400, Midland, TX 79701. These have all been notified of our application, as evidenced by the Certified Mailing receipts. A copy of the legal advertisement in the Hobbs News-Sun is enclosed for your information. This legal advertisement was published in the May 30, 1991 edition.

If there is any additional information that you need, please contact us and we will be happy to supply any information that is available.

Sincerely,

Farris Nelson

Frances The ser-

President

OIL CONSERVATION DIVISION

POST DEFICE BOX (4048) STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501

APPLICATION	FNR	AUTHORIZAT	10N	T ()	INJECT

MELETC	ATION FUR AUTHORIZATION TO INJECT
Ι.	Purpose: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? X yes no
II.	Operator: Zia Energy, Inc.
	Address: P. O. Box 2219, Hobbs, NM 88241
	Contact party: Farris Nelson Phone: 505-393-2937
111.	Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project?
v.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
* VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
*V1II.	Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
* X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
* XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification
	I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	Name: Farris Nelson Title President
	Signature: Darres Delson Date: May 30, 1991

of the earlier submittal. Gulf Oil Corporation drilled this well in June, 1967 as their

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hale size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.
 - NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Single (AIB); D MKCISIOND (5)	Million Line & ESTAST	SE, J Operi Co. Sun	Tomas Change Control	Del Chevron
Chevron Charefus Assistant Triple Graham Run. S. P. Chevron May 1879 1972	ASCS B' DODE	(WO) Apro Bust A	Zia Energy, Inc.	Since har Lines
1772 Graham Rey.	Sun 7 Granom Ray AMYORK	When the 18 2 1	Application For SWD Well	A CHAINT STORY
Morry County (Duel) (Du	Surfe 20	Millord Deck, Erriss	Simmons No. 2 SW-NE 5-22S-37E	Apacy Stophone
Chevren (re) Chevre	#10uelpes Marathen	The street of th	Lea County, New Mexico	Bison Pet.
n T Mattern Tr 23	Triace and	And the state of t		(Out) (m Steptens Est
O less many (M. Dock series)	A per per (e)	All and the second seco	Texaco Ayena	rass carrie as (6 u)
Cherren (J. (Oue)) (Fright & Due)	Mobil Virgii Lingin 5 6 Cordele Hardy (J. K. Hendris) 2 6 82 1	(Dust) Chevred 41 12	" lecknow" Deck (5) Burning Start	
Signature of the state of the s	2 Doch gerter Brown	obil # 24 26 And Treat	Small Treate Dual Dual SJ Ser Asya	ARCO Sarkey
Charles (Santana)	483 # 2 019 Ph	AT DISTRICT	(Aurathon Exxen Train S Cont)	And Seption
Tische Martin (186)	Old Continued of the Co	And the Control of Control	Marshari 4 4 Nardischia (Cong.) Dull sone	C Hill Of Aus Terricia.
Brownier Page 17 (00) 1 Page 17 (00) 1 Page 17 (00) 1 Page 17 (00) 1 Page 17 (00) 17 (00) 18 (Texaco 13 7 112 11 115	Mighti 20 Chevren 270 MA R Co) 6	(6)Piose (2) (8) (8) (8) (8) (8) (8) (8) (8) (8) (8	Amor
Chevron 3/8) 15 (PM)	Hamigna DE G T Chevron # 421	KARD INSTITUTE AND SALES IN	Thillips Small Tra Morando a, M. Leckherte Morando a mala se ana	
6 (2003)/ (1009 6 7) 7/2 220 0 0 0 (47) (10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHEVRONIOPER)	Buel (2 Son)	Dual (P/8) The Due! (11 off 5) Marshall Unit 3 4 A Herdison (11 off 5) Oxy Ut	Gal T PM
Oual 36 - Oual Chevral Add Sept of Same and Same and Sept of Same and Same and Sept of Same and Sept of Same and Sept of Same and	Wiser Oil (50me)	make a second	first SIINICE	
Shell Shell (Ground) // Amer. Early House in Ho		C. Hore 18 182	in energy "Kirra when Est And Mark Owen Est and Two	0000 and 0000
Gir Galbay Hy S Record	Wiser () Chewron Guir	Amerada	J.H.Hendrin (No.)	-
Conoco Conoco Chevron A & Sun of Sul	Chevran Day	(Buell) (The STA	Biss ener (Pasous) Tools of Biss ener (Pasous) Tools of Biss ener (Pasous) Tools of Biss (Biss ener	Bir Bing
1 100 (Maring Maring Ma	Siene Stand and Stand Stand Addition	W & funenalt from the first constant	Madella (Citres Serv.)	Comment of the commen
One Control of Control	Amaca Ziesest Saker	AACO COM	an Company of the Com	Supple Christman
10 S G Sure Con	2 133 (100 mm) 100 mm) 100 mm / 100 mm		A Lyunson Store	***
Chevron (ma) of Organia (ma) o		LH.Hendric Meb. 1 mg J 1003 EFFee (mu) LDuett	Mobil Out Enronged My Freshings 1 % Moral Control of State of Stat	
H T Mattern, T (1) 10 10 10 10 10 10 10 10 10 10 10 10 10	(Triple) Amoco (100)	Tiel Ener Minn Gill	100 15 Sec. 100 15	1
12 10 10 10 10 10 10 10 10 10 10 10 10 10	Jazos a had 3 6	Penrose A L Brunsen Blasserer: Exam Brasserer		Mobil 17 mg of
AR.Ca (7/8)	7 r.pl 4 0 3 3 7 0 4 1 Street 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	51.15m	Skell was Ener (men and a second of the seco	TO THE PART AND THE
Seyland Me The Market M	13 Au toratell	(Nes) Stalls, 16 12 18 18 18 18 18 18 18 18 18 18 18 18 18	Contract of Boar (Duct)	Ough
14 01 01 01 0 00 00 00 00 00 00 00 00 00 0	To be a second of the second o	Ino States	But Dong Freith	The state of the s
Acct 2 Account Septem / Chayrer 3 year	(ten poc) Fried Por Tag and the Harden	Sense Counce Bestalle Company 2 is Cherytone Culf St (Ann.) Cherytone Company (Pro) Company Company (Pro)		A STATE OF THE STA
3 11 Pacifier a Sin Frer	Transfer Control	CONTROL OFFI CHAPTER 16 Eleving T 2 2 Chapter 1 16 Elevi	Accounts of G L-Schwarzer (1) [1991] Accounts of	-
(PVB) American Europe (1982) (PVB) American Europe (1982) (PVB) American Europe (1982) (PVB) American Europe (1982) (PVB) (PVB	Aut Merrosyl Tie	(mm (int list) Buol Chevron	Manage Seder Canaca Plat Tr WY Pularis Prod (Control (Supplied)
"McDana'd" TM Stute	State Parsy Christmas	N E La Prato	E w Wander of the work of the transfer of the	(S) (Page Constitution Constitu
Merethon 21 to 25 Mar (Exam) Acct 18 es es es es es es	Amer. (Gulf Bettis, Boyle C Baptis Survey Sa Duc Survey Sa Duc Sa Duc Sa Duc Sa	Tr.8 Tr.6 Wegfer &	And Inc. All Columns of the Columns	
A.2614 ARCID 27 Jiens 7 16 3662 66 miles 10 17 68	Conoco 1141 Pentase	40 00 TA 78 K	Tr. mont good a hoose the labour, many and good	MCO & IO
"SO FUNICE " 19	Texacol (Exacol) Marriary 100	(Examily Anadar +	Meridigin 22 Exam // Lion Penyona Chaven 2 Jinhand	Transfer I and
SEVEN RIV. ON.)	10 PE TO CAMP TO CAMP TO THE PROPERTY OF THE P	Porher withing grant i, etg	Amorphia Fr. 15 Amorph	Table (ma)
12 Store TO 3800 Store 13 996	3 State State	State Estas) Adjacus allatica		AND STATE OF
Morroman 484 h 2623 4 431 434 ANCO #2 ²³ 436 ANCO #2 ²³ 686 Cta.	10 105000 Amer (1915 1 12 American 10 10 11 12 12 12 American 10 10 11 12 12 12 12 12 12 12 12 12 12 12 12	Class Magada 128 Agadarka	LANGLIE MATTIX GOTTO TI. HT	ما سند المصريحيات
600 Fra. 7 Fran	Fig. and Dio Hill Print	Anoderka D	ANADARKO (OPER)	
Stoke McClenard	29 by State	Tr. 28 W1 28 - 3 Tr. 24	(Anadarka) Anadarka) Anadarka)	
W. McCostons	Managarke	4.1	To See Arean Tel 18 See Arean	- E
103500 (Dalparo	Store Tr.39 '8 cases	10 3 100 M. Deck Est. (8)	State atal May R D 3/MS	S.m.
Morathan Action With A (Excel)	18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	² llr.35e ² l	(FRION)	and the

P 175 163 207

RECEIPT FOR CLH. HEL HAIL

NO INSURANCE COSTO (1997) DE DE PROPERTIES D (See Reverse:

	B. E. C. Corpor	ation
	P. O. Box 1392	
	Midland, TX 797	02
	Certified rice	167
	Spaces (mover, tree	
	de historia (2002)	
	tweet is a second to the work of the will be a second to the work of the work	1.00
· · · · · · · · · · · · · · · · · · ·	artain opin opin opin opin opin opin opin op	
	TOTAL POCKS entra	367
,	Postmark of Digital	,

P 175 163 208

HECEIPT TON COLOR AS MAN

NO NOUNAN TO A ST Beethere's

	Sent Mr. William B. Y	arborough
	Street and No 200 Loraine-Suit	e 1400
	Midland, TX 7970	1
	Postage	1.67
	Certified Fee	1.00
Ì	Special Delivery Fer	
	Restricted Delivery (1)	
	Heturn Heceipt Jook 04 to whom and Date Delivered	1.00
198	Heturn Receipt showing to whom Date, and Address of Date;	
June	TOTAL Postury Annual Res	367
PS Form 3800, June 1985	Postmark or Gald	

P 175 163 209

RECLIPT FOR CERTIFIED MAIL

NO INSURANCE LOVERALE PROVIDED NOT FOR INTERNATIONAL MAIL (See Reverse)

	Mr. Wayne Hens	on
	P. O. Box 605	
	P. P. Stute and ZHY Code Eunice, NM 882	31
	r ntage	1.67
	Ustiled her	1.00
	Coesial Gelivery Fee	
	held lited factoring five	
2	Return Receipt showing to whom and Date Delivered	1.00
e 198	Set, m Receipt showing to whom Date, and Address of Delivery	
J.	101AL Postago alig Pelis	367
PS Form 3800, June 1965	Postmark or Uate.	

P 175 163 206

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL (See Reverse)

	Sent to Chevron USA.	Inc.
	Direct and No. P. O. Box 68	
	PO state a 121P Code Eunice, NM 8	8231
	Postage	1.67
	Certified Fige	1.00
	Special Delivery Fee	
	Restricted Delivery Fee	
,	Return Receipt showing to whom and Date Delivered	1.00
June 1985	Heturn Heceipt showing to whom, Date, and Address of Delivery	
	TOTAL Postage and Tres	367
PS Form 3800,	Postmark or Date 1000	

ZIA ENERGY, INC.

PHONE (505) 393-2937

HOBBS, NEW MEXICO 88241

May 30, 1991

Mr. Wayne Henson P. O. Box 605 Eunice, NM 88231

Gentlemen:

Enclosed is a complete copy of our application to the New Mexico Oil Conservation Division for Administrative Approval of our proposed produced water disposal well. We propose to re-enter a plugged and abandoned well located 2310' FNL and 1980' FEL of Section 5, Township 22 South, Range 37 East, Lea County, New Mexico. This well will be designated as the Zia Energy, Inc. Simmons No. 2. It will be completed to dispose of produced water into the lower part of the San Andres formation, through perforations from 4456' to 5004'.

As the surface owner where a salt water disposal is to be located, you are being notified of our application in compliance with New Mexico Oil Conservation Division regulations.

Sincerely,

Farris Nelson

Farris Delson

President

Certified Mailing Number P 175 163 209

PHONE (505) 393-2937

HOBBS, NEW MEXICO 88241

May 30, 1991

B. E. C. Corporation P. O. Box 1392 Midland, TX 79702

Gentlemen:

Enclosed is a complete copy of our application to the New Mexico Oil Conservation Division for Administrative Approval of our proposed produced water disposal well. We propose to re-enter a plugged and abandoned well located 2310' FNL and 1980' FEL of Section 5, Township 22 South, Range 37 East, Lea County, New Mexico. This well will be designated as the Zia Energy, Inc. Simmons No. 2. It will be completed to dispose of produced water into the lower part of the San Andres formation, through perforations from 4456' to 5004'.

As an offset oil and gas leaseholder, you are being notified of our application in compliance with New Mexico Oil Conservation Division regulations.

Sincerely,

Farris Nelson

Farus nelson

President

Certified Mailing Number P 175 163 207

ZIA ENERGY, INC.

PHONE (505) 393-2937

HOBBS, NEW MEXICO 88241

May 30, 1991

Chevron USA, Inc. P. O. Box 688 Eunice, NM 88231

Gentlemen:

Enclosed is a complete copy of our application to the New Mexico Oil Conservation Division for Administrative Approval of our proposed produced water disposal well. We propose to re-enter a plugged and abandoned well located 2310' FNL and 1980' FEL of Section 5, Township 22 South, Range 37 East, Lea County, New Mexico. This well will be designated as the Zia Energy, Inc. Simmons No. 2. It will be completed to dispose of produced water into the lower part of the San Andres formation, through perforations from 4456' to 5004'.

As an offset oil and gas leaseholder, you are being notified of application in compliance with New Mexico Oil Conservation Division regulations.

Sincerely,

Farris Nelson

Farris Delson

President

Certified Mailing Number P 175 163 206

ZIA ENERGY, INC.

PHONE (505) 393-2937

HOBBS, NEW MEXICO 88241

t z

May 30, 1991

Mr. William B. Yarborough 200 Loraine-Suite 1400 Midland, TX 79701

Gentlemen:

Enclosed is a complete copy of our application to the New Mexico Oil Conservation Division for Administrative Approval of our proposed produced water disposal well. We propose to re-enter a plugged and abandoned well located 2310' FNL and 1980' FEL of Section 5, Township 22 South, Range 37 East, Lea County, New Mexico. This well will be designated as the Zia Energy, Inc. Simmons No. 2. It will be completed to dispose of produced water into the lower part of the San Andres formation, through perforations from 4456' to 5004'.

As an offset oil and gas leaseholder, you are being notified of our application in compliance with New Mexico Oil Conservation Division regulations.

Sincerely,

Farris Nelson

Farus Miller

President

Certified Mailing Number P 175 163 208

		DISPOSAL WEL		Zia Energy, Inc. Application For Simmons No. 2	SWD Well
Zia Energy, I	inc.		Simmons	SW-NE 5-22S-37 E	
Operator 2 2	2310' FNI	& 1980' FRI	Lease 5	Lea County, New 1 22 South	Mexico 37 East
Well No.	Footage Lo	cation	Section	Township Lea County, I	Range New Mexico
Schemntic			Ynbu	lur Dutn	
		Surfac	e Enging		
		Sizo	13 3/8	Comented with	1100
	1 1			et determined by C	
		1 1	3 60 3 7	2"	
		11010	17 1/		
		Interm	ediate Casing		
		Stre	NONE .	Comented with	
		13 3/8".a			
_		1 1		ot determined by	
_	.	Hole s	120		
•		Long •	tring		
	}			Comented with	960
				t determined by Ten	ip. survey
			12 1/4		
		TOC @ Total	depth <u>5015'</u>	Elevat	1on 3424 GL
		2275*	ion interval		
		_		4010.	
		Teerlai	6' feet to	indicate which)	et
		Peri	orated 4456' - 4902' -		
	I i		7,00	* / ~ ~	

Zia Energy, Inc.
Application For SWD Well
Simmons No. 2
SW-NE 5-225-37E

B.E.C. Corp.

OPERATOR

1980' FSL & 860' FWL 5

WELL NO.

Grizzell Deep
Simmons No. 2
SW-NE 5-22S-37E
Lea County, New Mexico
2 1980' FSL & 860' FWL 5
22 South 37 EXB C

Lea County, New Mexico

			Des Courses Montage
	Schematic		Tabular Data
1		1	Size 8 5/8" Depth 1180 ' Cemented with 550 sx. TOC Surface feet determined by calculated
		8 5/8" • 1180'	Hole size 12 1/4"
			Hole size Long string Size 5 1/2" Depth 6750' Cemented with 925 sx. TOC 343 feet determined by calculated
			Hole size 7 7/8" Total depth 6750' 'Elevation 3449' GL Perforations: From 6458 'To 6664 ' Stimulation: Drinkard - 6458' - 6664' Treated w/ 12,000 GA
	TO 34		Intial potential Drinkard - 25 BOPD + 150 MCF/D

5 1/2" @

PRODUCTION WELL DATA SHEET

Zia Energy, Inc.

Lee Stebbins (NCT - A)

Chevron USA, Inc. LEASE OPERATOR

SW-NE 5-22S-37E Lea County, New Mexico

22 South 37 East 1870' FNL & 2092' FWL SECTION TOWNSHIP FOOTAGE LOCATION RANCE WELL NO.

Lea County, New Mexico

Tabular Data Schematic Surface Casing TOC 9 Size 13 3/8" Depth 293 'Cemented with 320 ex. Surface TOC Surface feet determined by circulated Hole size 17 1/4" 13 3/8"@ Intermediate Casing 293' Size 9 5/8"" Depth 2800 ' Cemented with 1300 ex. 815 feet determined by calculated Hole size 12 1/4" Long string Size 7" Depth 6532' Cemented with 750 sx. TOCO 815' TUC 2725' feet determined by calculated 8 3/4" Hole size Total depth 6595 3451 ' Elevation Perforations: From 6430 • To 6595 9 5/8** Stimulation: Drinkard - 6532' - 6595', 4000 GA 6430' - 6460' w/ 4000 GA Tubb - 6090' - 6295' w/15000 GRO+1#sd 2800 Blinebry - 5856' - 5705' w/500 GA + 24,000 GRO w/3#sd/g TOC 9 2725' Intial potential Drinkard - 14 BOPD Tubb - not reported Blinebry - 38 BOPD + 1305 MCF/D Note: a) Blinebry perfs. 5705' - 5856' squeezed w/ 150 sxs cmt. b) Tubb perfs 6090' - 6295' squeezed w/175 sxs cmt.

LEASE

Zia Energy, inc. Application For SWD Well

Simmons No. 2

Lee Stebbins (NCT-A) Chevron USA, Inc.

SW-NE 5-22S-37E Lea County, New Mexico

1830' FNL & 660' FWL 4

22 South

37 East

FOOTAGE LOCATION WELL NO.

OPERATOR

SECTION

TOWNSHIP

RANCE

Lea County, New Mexico

Tabular Data Schematic Surface Casing TOC @ Surface Size 8 5/8" Depth 1210 ' Cemented with 550 sx. TOC Surface feet determined by circulated Hole size 12 1/4" 8 5/8"

Intermediate Casing 1210'

Size "Depth Cemented with sx. TOC______feet determined by_____

Long string

Size 5 1/2" Depth 6750' Cemented with 1785 sx. TOC Surface feet determined by circulated Hole size 7 7/8"

Total depth 6750 'Elevation 3440' GL TOC . Surface

Hole size

Perforations: From 6456 'To 6650

Stimulation: 5000 GA

Intial potential 20 BOPD + 55 MCF/D

5 1/2" • 67501

TD 6750'

PRODUCTION WELL DATA SHEET

Zia Energy, Inc. Application For SWD Well

Simmons No. 2

Lee Stebbins (NCT-B)

LEASE

SW-NE 5-22S-37E Lea County, New Mexico 22 South 37 East

OPERATOR 3

WELL NO.

Chevron USA, Inc.

660' FNL & 460' FEL FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

Lea County, New Mexico Tabular Data

Schem	atic .	Industry Duck
	TOC @ Surface	Size 13 3/8" Depth 295 Cemented with 300 ex. TOC Surface feet determined by circulated
	13 3/8" 295'	Hole size 17 1/4" Intermediate Casing Size 9 5/8"" Depth 2950 Cemented with 1300 ox. TOC 1555 feet determined by Temp Survey
	TOC • · 1555•	Hole size 12 1/4" Long string Size 7 Depth 6500° Cemented with 700 ex. Tuc 2930 feet determined by Temp Survey Hole size 8 5/8"
		Total depth 6597 'Elevation 3464' DF Perforations: From 'To
	9 5/8" • 2950' TOC • 2930'	Stimulation: Drinkard - open hole 6500' - 6597' Trtd w/ 10,000 GA Tubb - 6050' - 6235' Blinebry - perfs 5716' - 5927' Trtd w/5500 GA + 118,000 GGW + 400,00 #sd
		Intial potential Drinkard - 78 BOPD Tubb - 2950 MCF/D
		Blinebry - 25 BOPD + 202 MCF/D

	•			cation For SWD Well
Gulf Oil C	orporation	South Penrose S	kelly Unit SW-NE	5-22S-37E
OPERATOR		LEASE 5	Lea C	ounty, New Mexico
1-WSW 2310	* FNL & 1980 FEL	5	22 South	37 East
WELL NO.	FOOTAGE LOCATIO	ON SECTION	TOWNSHIP	RANCE
		Lea	County, New Mex	cico
Sc	hematic	Tabular	Deta	. .
mt plug 🕶	TOC S surface	Surface Casing Size13 3/8 " Dept TOC Surface	feet determin	
		Hole size 17 1/2" PIntermediate Casing		
	1224'	Size NONE " Dept	h Cem	ented with say
mt plug @ 138'-1310'		TOC	_ feet determin	ned by
t plug 🕏 50'-2500'	TOC 0 2275'	Long string Size 9 5/8 " Dept TOC 2275' Hole size 12 1/4" Total depth 5014 Production Interval	fact determine	3424 GL
		Plugging Operations Surface casing pull Top of stub Long String Casing pull Top of stub	ed: Size	·
t plug @ 50'-3925'. BP @ 25'		Cement plugs: 1. Amount 20 si 2. Amount 50 si 3. Amount 600 si 4. Amount 35 si 5. Amount si 6. Amount si Bridge plug Set: Ty Fluid in Hole Abando	From 2350 From 1138 From Surface From From CIBP	To 3925 To 2500 To 1310 To 100 To To Depth 3925
		P & A - 2/28/85		

Zia Energy, Inc. Application For SWD Well

Simmons No. 2 SW-NE 5-22S-37E

Chevron USA Inc. OPERATOR

Lee Stebbins (NCT - B) LEASE

Lea County, New Mexico 37 East

WELL NO.

660' FNL & 1780' FEL FOOTAGE LOCATION

SECTION

22 South TOWNSHIP

RANGE

Lea County, New Mexico

Schematic

Tabular Data

•	3CHEMBETC.	
	. 111	Surface Casing
	TOC Surface	Size 13 3/8" Depth 301 'Cemented with 310 ex. TOC Surface feet determined by calculated
	13 3/8"	Hole size 17 1/4"
	TOC @ Surface	Size 7" Depth 6509' Cemented with 700 sx. Toc 921 feet determined by calculated Hole size 8 3/4"
	9 5/8" • 1300.	Total depth 6585 'Elevation 3462' DF Perforations: From 6509 'To 6585 ' Stimulation: Drinkard - open hole 6509' - 6585' Add'l perfs 6370' - 6500'. Trt. w/3000 GA + frac w/35,000 GGW w/ 1 - 2 #SPG (1975)
-	TOC 921'	Intial potential Drinkard - 135 BOPD

TD 6585°

Zia Energy, Inc. Application For SWD Well Simmons No. 2 SW-NE 5-22S-37E

William B Yarborough Downes LEASE OPERATOR Lea County, New Mexico 2 900' FNL & 1840' FNL 5 22 South 37 East SECTION TOWNSHIP FOOTAGE LOCATION RANGE WELL NO.

Lea County, New Mexico

Tabular Data Schematic Surface Casing Size 10 3/4" Depth 260 Cemented with 200 ex. TOC @ Surface TOC Surface feet determined by calculated Hole size __ 15 1/2" 10 3/4"@ Intermediate Casing 260' Size 7 5/8 " Depth 2625 ' Cemented with 800 ex. Toc Surface feet determined by calculated TOC @ Surface Hole size 9 5/8" Long string Size 5 1/2" Depth 6485' Cemented with 350 ex. TUC 1456 feet determined by calculated 6 3/4" Hole size Total depth 6612 _' Elevation 3447 GL Perforations: From 6550 1 To 6600 7 5/8" • 2625' Stimulation: Drinkard - open hole 6550' - 6600' w/2000 GA. Paddock - 5169' - 5231'. Trt w/1000 G/ TOC 9 1456' Intial potential Drinkard - 197 BOPD + 528 MCF/D Paddock - 99% wtr.-Sqzd w/50 sxs cmt.

5 1/2" @ 6485"

Zia Energy, Inc. Application For SWD Well Simmons No. 2 SW-NE- 5-22S-37E

B.E.C. B.A. Christmas LEASE Lea County, New Mexico OPERATOR 22 South 1 2200' FNL & 880' FEL 37 East FOOTAGE LOCATION SECTION TOWNSHIP WELL NO. RANCE

Lea County, New Mexico

C------

Tabular Data

	SCHEMEL	10	***
		1) f	Surface Casing
1		TOC @	Size 13 3/8" Depth 150 Cemented with 150 ex.
1		Juitage	TOC Surface feet determined by calculated
l			Hole size 17 1/2"
		13 3/8" (Intermediate Casing
			Size 8 5/8" Depth 2880 ' Cemented with 1500 ex.
		TOC @ Surface	TOC Surface feet determined by calculated
] [Surrace	Hole size 11 3/4"
			Long string
			Size 5 1/2" Depth 6476' Cemented with 300 sx.
			Toc 4398' feet determined by calculated Hole size 7 7/8"
			Total depth 6550 'Elevation 3429' GL
			Perforations: From 6476 'To 6550
			Stimulation: 6000 GA
		2880'	
		TOC @	
		4398*	
			Intial potential Drinkard - 72 BOPD 11007 GOR
~	1 1		
			1914 124 Mills &
	1 1		1.2
	1 1	5 1/2" •	
		5 1/2" Θ 6μ26'	

Zia Energy, Inc.

Simmons

Zia Energy, Inc. Application For SWD Well Simmons No. 2 SW-NE 5-22S-37E Lea County, New Mexico

OPERATOR 1

LEASE

22 South TOWNSHIP

37 East

WELL NO.

1760' FNL & 1760' FEL FOOTAGE LOCATION

SECTION

Lea County, New Mexico

Tabular Data Schemaric Surface Casing TOC @ Size 13 3/8" Depth 161 ' Cemented with 160 ex. Surface TOC Surface feet determined by circulated Hole size 17 1/2" 13 3/8" Intermediate Casing. 161 Size 8 5/8" Depth 2947 Cemented with 1500 ex. TOC Surface feet determined by circulated TOC . Surface 11" Hole size Long string Size 5 1/2" Depth 6488' Cemented with 300 ex. TUC 3140 feet determined by calculated Hole size 7 7/8" TO 5 1/2" Total depth 6549 Elevation 3447 DF 2800 Perforations: From 5630 To 8 5/8" • 2947 Stimulation: Re-entered 2/5/91. c/o to TD 6549. Stimulated perfs from 5630' to 6549' w/15.000 GA. TOC 9 3140 Intial potential 2 1/4 BOPD + 12 1/2 MCF/D 5 1/2" @

6488

Zia Energy, Inc. Application For SWD Well

Simmons No. 2

SW-NE 5-22S-37E

Grizzell Zia Energy, Inc. LEASE

Lea County, New Mexico

Lea County, New Mexico

1 660' FSL & 1980' FEL

OPERATOR

5 22 South 37 East

FOOTAGE LOCATION WELL NO.

SECTION

TOWNSHIP

RANCE

Schematic

Tabular Data

	141 8	Surface Casi	ng	
1	TOC Surface			Cemented with 150 sx
1 111		TOC Surface	feet de	termined by calculation
1 111			15"	
	13" e	Intermediate		
	150 E	1X\$1ze <u>8 5/8</u> "	Depth 1237	Cemented with 250 ex
]]]	TOC# 57"	TOC 57	feet de	termined by calculation
111	1 3 5 6 " 9	Hole size	11"	11
	250 sxs	Intermediate C	asing	
				Cemented with 150 ex
11	TOC @		feet de	termined by calculation
[]	2479'	Hole size	9*	***
		Long String		.
		5 1/2" Size 5 "	Depth 3319-64	9' 65'Cemented with 500 sx
	7" 9 3510	a TOC Surface	feet determin	ed by cmt circulated
	1)0 8%	Hole size		-
		Total depth	6562 E1	evation 3442° DF
			From	
				n hole 3510' - 3765'
l	roc e Surface	Ţ	reated w/ 300	0 GA n hole 6465' - 6562'
	Burrace	Ť	reated w/ 300	O GA. Perf 6329' - 6419' O GA & 20,000 GGLO w/
		Ţ	reated w/ 500	0 GA & 20,000 GGLO w/
		I.	1/2# sd/gal.	fs 5562' - 5906'. Trtd w
		3	000 GA + 30,0	00 GKCL w/ 37500# sd
	5 1/2" 4 5"	A- 1.1.1	Gravhurs	- 168 BOPD
]	6465' w/	winitial potent	ial Grayburg	
	500 sxs		Drinkard	- 288 BOPD + 852 MCF/D
TD 656	2'		Blinebry	- 16 BOPD + 450 MCF/D

PRODUCTION WELL DATA SHEET

Zia Energy, Inc.
Application For SWD Well
Simmons No. 2
SULNE 5-225-37E

Grizzell Zia Energy, Inc. SW-NE 5-225-37E Lea County, New Mexico LEASE OPERATOR 22 South 37 East 2 1980' FSL & 1980' FEL TOWNSHIP SECTION ... RANGE FOOTAGE LOCATION WELL NO. Lea County, New Mexico

Tabular Data Schematic Surface Casing TOC . Size 9 5/8" Depth 259 'Cemented with 200 ax. Surface TOC Surface feet determined by calculation 11" Hole size 5/8" · Intermediate Casing 259' Size 7 " Depth 3468 ' Cemented with 359 ex. 675 feet determined by calculation TOC 8 3/4" Hole size Long string 0-33521 5 1/2" Depth 3352'-6516 dented with 300 sx. size 5" TOC 675 TUC 3336" feet determined by Temp.survey 6 1/4" Hole size __' Elevation 3440° GL • 6580 Total depth Perforations: From To Stimulation: Grayburg - open hole 3468' - 3750' Treated w/ 3000 GA. Perfs 3636' - 3692' Trtd w/ 7"@34681 2000 GA Drinkard - open hole 6515' - 6580' Treated w/ 3000 GA. Intial potential Grayburg - 144 BOPD + 500 MCF/D TOC • 3336" Drinkard - 130 BOPD + 113 MCF/D

PBTD € 3877'

5" @ 6515' w/ 300 sxs

Lia bliergy, mic. Application For SWD Well Simmons No. 2

Zia Energy, Inc. Grizzell SW-NE 5-22S-37E Lea County, New Mexico LEASE OPERATOR TOWNSHIP SECTION RANGE WELL NO. FOOTAGE LOCATION

Schematic

Tabular Data

		Surface Casing
1 1	TOC • Surface	Size 9 5/8" Depth 1185 ' Cemented with 825 sx.
1 1		TOC Surface feet determined by calculation
	} }	Hole size 12 1/4"
	9 5/8"	Intermediate Casing
		Size "Depth Cemented with sx.
	}	TOC feet determined by
		Hole size
		Long string
		Size 5 1/2" Depth 7500' Cemented with 1100 sx.
		TUC 3900 feet determined by Bond Log
	TOC •	Hole size 8 3/4"
İ	3900'	Total depth 7500° Elevation 3424° GR
		Perforations: From To
		Stimulation: <u>Fusselman - Montoya</u> 7200' - 7360' 8128 GA + 30,000 GGW + 17,500 #sd
		<u>Drinkard</u> - Perf 6426' 6541'
		Trtd w/ 5000 GA San Andres - Perf 3950' - 4050'
		Intial potential Fussellman-Montoya 22BOPD+22MDF/I Drinkard - 12 BOPD+83 MDF/D
		San Andres - 4 BOPD+433 MCF/D + 147 GWPD
		Note: a) Fussel-Montoya perfs. squeezed w/ 100 sx cement w/ ret. @ 7168' b) Drimkard perfs below CIBP @ 4511' & 20' of cement.
	5 1/2" @ 7500'	•

PLUGGED WELL DATA SHEET

Lia Energy, Inc.
Application For SWD Well
Simmons No. 2
SW-NE 5-22S-37E

Sohio Petroleum Company Grizzell Lea County, New Mexico LEASE OPERATOR 1760' FNL & 1760' FEL 22 South 1 37 East SECTION TOWNSHIP FOOTAGE LOCATION RANGE WELL NO. Lea County, New Mexico Tabular Data Schamatic TOC • Surface Surface Casing Size 13 3/8 " Depth 161 ' Cemented with 160 ex. TOC Surface feet determined by circulated Hole size 17 1/2" **1**13 3/8" Intermediate Casing 161' Size 8 5/8 " Depth 2947 ' Cemented with 1500 ... TOC surface feet determined by circulated TOC . Hole size 11" 1140 Long string Size 5 1/2 " Depth 6488 Cemented with 300 sa TOC 3140' feet determined by ealculation Hole size 7 7/8" Total depth 6549 Elevation 3447° D F Production Interval: Prom 5630 1 To 6549 8 5/8* • Plugging Operations: 2947 Surface casing pulled: Size ____ Amount NONE ... Top of stub TOC 9 Long String Casing pulled: Size 5 1/2 Amount 2852 441 Top of stub 2852 Cement pluge: AmountCIBP+10 sx From 6215 To 6250 From 5902 Amount CTRP+10_8X AmountCIBP+10 sx From 546 To To 2870 2560 Amount 65
Amount 40 . 8 X From_ 5. from_ 4× To 1000 Amount_ _40_sx From Surface Bridge plug Set: Type____ Depth Fluid in Hole Abandonment mud P & A = 3/11/855 1/2" 6488

TD 6549'

Gulf Oil Corp.

L.I. Baker

SW-NE 5-22S-37E LEASE Lea County, New Mexico

OPERATOR 2086' FSL & 554' FEL FOOTAGE LOCATION 5 22 South 37 East WELL NO. SECTION TOWNSHIP RANGE

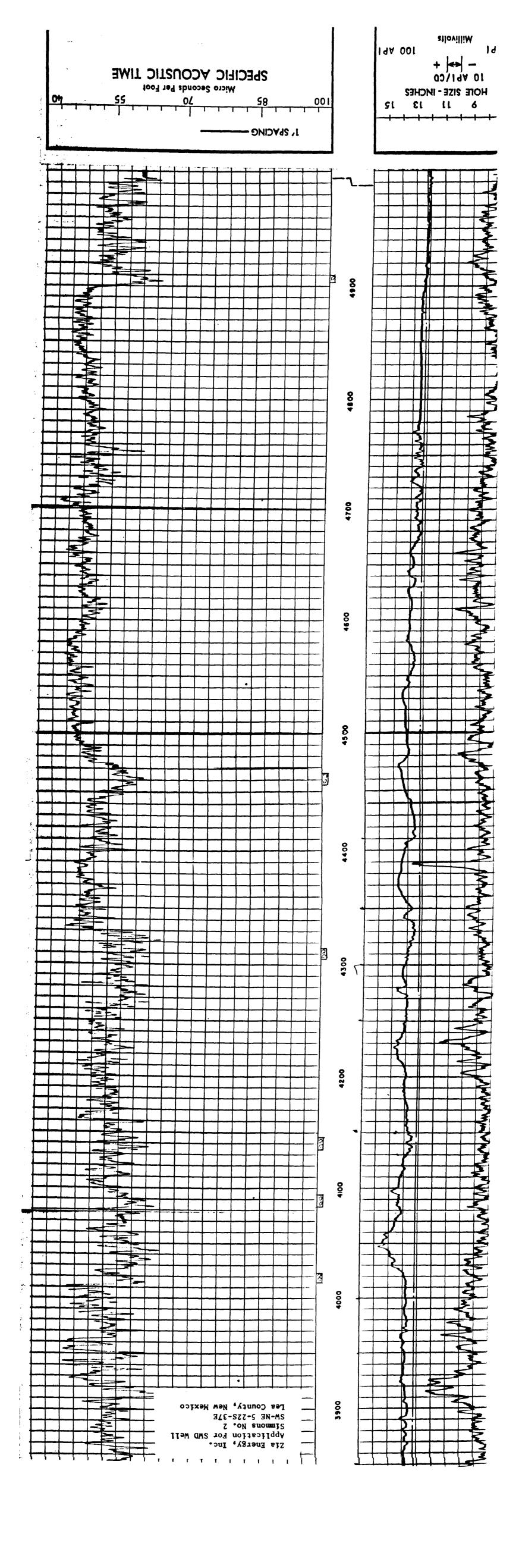
Schemati	C Tabular Data
Ret. © 275' pumped 200 sxc	Surface Surface Casing Size 13 3/8 " Depth 293 ' Cemented with 300 TOC Surface feet determined by circulat Hole size 17 1/4" 13 3/8" Intermediate Casing Size 9 5/8 " Depth 3000 ' Cemented with 1300
to surface	TOC 1390 feet determined by calculat Hole size 12 1/4" TOC C Long string 1390' Size 7" " Depth 8291 ' Cemented with 925
	Toc 2575 feet determined by calculat Hole size 8 3/4" 9 5/8" Total depth 8291 Elevation 3439 DF Production Interval: From To
mt. plugs • 950'-5050' 350'-5950'	TOC Plugging Operations: Surface casing pulled: Size Amount NONE Top of stub Long String Casing pulled: Size H Amount NONE
650° 900°-7000°	Top of stub Cement plugs: 1. Amount 60 sx From 6900 To 7800 2. Amount 20 sx From 6575 To 6650 3. Amount 20 sx From 6275 To 6350 4. Amount 25 sx From 5850 To 5950 5. Amount 50 sx From 5350 To 5400 6. Amount 25 sx From 4950 To 5050
	Bridge plug Set: Type Retainer Depth 275 Fluid in Hole Abandonment mud 7. Amount 200 sx From 275 ' To Surface Circulated up annulus of 13 3/8", 9 5/8", & 7 7/8":
	8. 50' surface plug.

PLUGGED WELL DATA SHEET

Zia Energy, Inc.
Application For SWD Well
Simmons No. 2

Simmons No. 2 W.M. Rinewalt Gulf Oil Corporation SW-NE 5-22S-37E LEASE Lea County, New Mexico OPERATOR 4 37 E251 22 South 2086' FNL & 766' FWL 3 TOWNSHIP SECTION RANGE FOOTAGE LOCATION WELL NO. Lea County, New Mexico

	Schematic	Tabular Data
lug @ urface	TOC	Surface Casing Size 13 3/8" " Depth 325 ' Cemented with 300 to C Surface feet determined by calculate Hole size 17 1/2"
et. •	TOC	Size 9 5/8" " Depth 2975 Cemented with 1300 TOC Surface feet determined by calculating the size 12 1/4"
ol8' w/ 00 sxs irculated		Long string Size 7 "Depth 6466' Cemented with 700 TOC 878 feet determined by excludate Hole size 8 3/4"
Plug @ 2390'-2490' Plug @ 304'-3404'	9 5/6 297 TOC 6 878	Production Interval: Prom 6466 To 6585 Plugging Operations: Surface casing pulled: Size Amount NONE Top of stub
1808'-3908' IBP @ 1496' Plug @ 1975'-6075'		Long String Casing pulled: Size
	7" • 6466•	Bridge plug Set: Type CIBP Depth 5496' Fluid in Hole Abandonment mud Note: Perf. 7" @ 712' - 716'. Set retainer @ 618'. Pumped 500 sxs cmt. circulated to surface. P & A - 10/11/83



							Fo	rm C-10	. C
NO. OF COPIES RECEIVE	E						Re	vised l	
DISTRIBUTION			W MEXICO OILL	30 30 710 P	: C. C. C.				ype of Legse
NTA FE		NE	W MEXICO OLL	CONSERVATI	ON COMMISSION	N	1	ıte	Fee XX
.E .g.s.		WELL COMP	LETION OR R الٰ	ECOMPLETI	ONBELOKI	AND L	OG 5, Stat		Gas Lease No.
ND OFFICE			لاُلُ	H B 3 20	1 11 00		ļ		
ERATOR							7777	m	anni anni anni
		•							
TYPE OF WELL							7. Uni	t Agreer	nent Name
	OIL Wel	🗀 💝	ELL DRY	OTHER	Water Sup	ply W	ell Sont	h Pe	nrose Skelly
TYPE OF COMPLE							I		
ame of Operator		:N SA	CK DIFF.	OTHER	Water Sup	ply W	ell Son	h Pa	prose Skelly
·							·	.	_
alf Oil Corp	poration							eld and	Pool, or Wildcat
•							ı		·
ocation of Well	S NOW THE	1.00					1111	LOS	Skelly
LETTER G	LOCATED 2	310	T FROM THE	rth LINE AI	1980	_ FEET FR	<i>())))</i>		
		,		IIII	TIKITII.	IIII	12. Co	unty	.,,,,,,,,,,,,,
Best LINE OF	sec. 5 7	wp. 22-5	RGE. 37-E	MPM (())				Lea	
Date Spudded	16. Date T.D. F	Reached 17. Do	ate Compl. (Ready	to Prod.) 18	Elevations (DF	, RKB, R	T, GR, etc.,	19. EI	lev. Cashinghead
-19-67 Total Depth	3-31-67	6-	<u>5-67</u>		3424' OL				-
•	1 .		22. If Mu Many	iltiple Compl., 1	low 23. Interv	ed Rv.	Rotary Tools		Cable Tools
151		77'	Sing	(Te		<u>→ : (</u>	0 - 5015		
Producing Interval(s	s), of this comple	tion — Pop, Bot	tom, Name					25.	, Was Directional Surv Made
aib Lozor									
									W.
	ther Logs Run				· · · · · · · · · · · · · · · · · · ·		F	27 Was	No.
Type Electric and C	Other Logs Run								Well Cored
Type Electric and C	Other Logs Run		CASING RECORD	(Report all strin	gs set in well)			27, Was	Well Cored
Type Electric and C	Other Logs Run		CASING RECORD	(Report all strin	1	ENTING	RECORD		Well Cored
Type Electric and C R-RHC gonic CASING SIZE		/FT. DEF	PTH SET		CEME		RECORD	<u> </u>	Well Cored
Type Electric and C R-RHC gonic CASING SIZE	WEIGHT LB.	/FT. DEF	PTH SET	HOLE SIZE	INO sack	• (cr	RECORD	3)	Well Cored
Type Electric and C R-RHC gonic CASING SIZE	WEIGHT LB.	/FT. DEF	2241	17-1/28	INO sack	• (cr	RECORD TOD LA LOC	3)	Well Cored
Type Electric and C R-RHC gonic CASING SIZE	WEIGHT LB.	/FT. DEF	PTH SET 22),1 01),1	17-1/28	1100 sack	• (cr	record reclated	1) 75")	Well Cored AMOUNT PULLED
Type Electric and C R-HHC sonic CASING SIZE 3-3/89 3-5/89	1,84 364	/FT. DEF	22),1 01),1	HOLE SIZE 17-1/20 12-1/10	1100 sack 260 sack	s (C1: s (TO	RECORD TO LA LOC TUBING	1) 75!)	Well Cored AMOUNT PULLED
Type Electric and C R-RHC gonic CASING SIZE	WEIGHT LB.	INER RECORD	PTH SET 22),1 01),1	HOLE SIZE 17-1/20 12-1/10	CEME 1300 sack 260 sack 30.	s (C1)	RECORD TOU LA LECT TUBING DEPTH SE	RECOR	Well Cored AMOUNT PULLED RD PACKER SET
CASING SIZE	1,84 364	/FT. DEF	22),1 01),1	HOLE SIZE 17-1/20 12-1/10	1100 sack 260 sack	s (C1)	RECORD Colate C	1) 75!)	Well Cored AMOUNT PULLED RD PACKER SET
CASING SIZE 3/8* SIZE	WEIGHT LB.	INER RECORD	22),1 01),1	HOLE SIZE 17-1/20 12-1/48 NT SCREE	30. N SIZE	s (C1) s (TO	TUBING DEPTH SE	RECORET (Reda	AMOUNT PULLED RD PACKER SET Prop
SIZE Perforation Record (WEIGHT LB. 1,84 364 L TOP	INER RECORD BOTTOM Bone d number)	SACKS CEME	17-1/20 12-1/1:3 INT SCREE	CEME 1300 sack 260 sack 30.	S (CI)	TUBING DEPTH SE	RECORET (Reda	AMOUNT PULLED AMOUNT PULLED PACKER SET Pump)
CASING SIZE 3-3/8* SIZE Perforation Record (WEIGHT LB. 1,84 364 L TOP	INER RECORD BOTTOM Mone d number) d with 2,	SACKS CEME	HOLE SIZE 17-1/20 12-1/18 INT SCREE 32. DEPT	30. N SIZE 2-7/81 ACID, SHOT, II	(CI)	TUBING DEPTH SE JRE, CEMEN	RECORET (Reda	AMOUNT PULLED RD PACKER SET Pump) EZE, ETC. MATERIAL USED
CASING SIZE 3.3/8* SIZE Perforation Record (5/8* casing ()13-22*, 108	WEIGHT LB. 1.84 3.64 TOP (Interval, size and perforate) 3-921, 113	INER RECORD BOTTOM Mone d number) d with 2,	SACKS CEME	HOLE SIZE 17-1/20 12-1/18 INT SCREE 32. DEPT	30. N SIZE 2-7/8	(CI)	TUBING DEPTH SE JRE, CEMEN	RECORET (Reda	AMOUNT PULLED AMOUNT PULLED PACKER SET Pump)
CASING SIZE 3-3/8* SIZE Perforation Record (WEIGHT LB. 1.84 3.64 TOP (Interval, size and perforate) 3-921, 113	INER RECORD BOTTOM Mone d number) d with 2,	SACKS CEME	HOLE SIZE 17-1/20 12-1/18 INT SCREE 32. DEPT	30. N SIZE 2-7/81 ACID, SHOT, II	(CI)	TUBING DEPTH SE JRE, CEMEN	RECORET (Reda	AMOUNT PULLED RD PACKER SET Pump) EZE, ETC. MATERIAL USED
CASING SIZE CASING SIZE 3-3/8* SIZE Perforation Record (-5/8* casing () 13-22*, 108	WEIGHT LB. 1.84 3.64 TOP (Interval, size and perforate) 3-921, 113	INER RECORD BOTTOM Mone d number) d with 2,	SACKS CEME	HOLE SIZE 17-1/28 12-1/18 INT SCREE 32. 0EPT 1013	30. N SIZE 2-7/81 ACID, SHOT, II	(CI)	TUBING DEPTH SE JRE, CEMEN	RECORET (Reda	AMOUNT PULLED RD PACKER SET Pump) EZE, ETC. MATERIAL USED
CASING SIZE CASING SIZE 3-3/8* SIZE Perforation Record (-5/8* casing 013-22*, 108 4* and 1902~	WEIGHT LB. 1.84 364 TOP (Interval, size and perforate 3-921, 113, 101	INER RECORD BOTTOM Bone d number) d with 2,	22h1 01h1 SACKS CEME	17-1/28 12-1/18 INT SCREE 32. DEPT 1013 RODUCTION	30. N SIZE 2-7/8: ACID, SHOT, IH INTERVAL	(CI)	TUBING DEPTH SE 3925! ORE, CEMEN AMOUNT AN	RECORET (Reda	AMOUNT PULLED PACKER SET Pump) EZE, ETC. MATERIAL USED 28 WPA
CASING SIZE CASING SIZE 3-3/8* SIZE Perforation Record (-5/8* casing 013-22*, 108 4* and 1902~	WEIGHT LB. 1,84 364 TOP (Interval, size and perforate) 3-921, 113 101	INER RECORD BOTTOM BOTTOM d number) d with 2,	SACKS CEME 75° JHPF 06-14°, 145	17-1/28 12-1/18 INT SCREE 32. DEPT 1013 RODUCTION	30. N SIZE 2-7/8: ACID, SHOT, IH INTERVAL	(CI)	TUBING DEPTH SE JRE, CEMEN AMOUNT AN OFFICE Well	RECORET (Reda	AMOUNT PULLED AMOUNT PULLED PACKER SET PORP) EZE, ETC. MATERIAL USED 28% HEA
CASING SIZE CASING SIZE 3-3/8* 9-5/8* SIZE Perforation Record (-5/8* casing 013-22*, 108 4* and 1902~	WEIGHT LB. 1,84 364 TOP (Interval, size and perforate 3-92', 113) Production 100	INER RECORD BOTTOM BOTTOM d number) d with 2,	SACKS CEME 75° JHPF 06-14°, 145 Prowing, gas lift, 1	HOLE SIZE 17-1/28 12-1/48 INT SCREE 32. DEPT 6- 1013 RODUCTION pumping - Size of	30. N SIZE 2-7/8 ACID, SHOT, II H INTERVAL 1,9701	FRACTU	TUBING DEPTH SE 3925! IRE, CEMEN AMOUNT AN Ogallor Well	RECORET Reda	AMOUNT PULLED AMOUNT PULLED PACKER SET Parp) EZE, ETC. MATERIAL USED 285 HPA Prod. or Shut-in)
CASING SIZE CASIN	WEIGHT LB. 1,84 364 TOP (Interval, size and perforate) 3-921, 113 101	INER RECORD BOTTOM BOTTOM d number) d with 2,	SACKS CEME 75° JHPF 06-14°, 145 Prowing, gas lift, 1	HOLE SIZE 17-1/20 12-1/18 INT SCREE 32. DEPT 1013 RODUCTION pumping — Size of the s	30. N SIZE 2-7/8: ACID, SHOT, IH INTERVAL	FRACTU	TUBING DEPTH SE 39251 Well Well Water — Bbi	RECORET Reda	AMOUNT PULLED AMOUNT PULLED PACKER SET PORP) EZE, ETC. MATERIAL USED 28% HEA
CASING SIZE CASIN	Interval, size and perforate 3-92', 413-10'	INER RECORD BOTTOM BOTTOM Mone d number) d with 2, li-li6', li3' action Method (F	SACKS CEME SACKS CEME 75° JHPF 06-11, 1415 Plump Prod'n. For Test Period	HOLE SIZE 17-1/20 12-1/18 INT SCREE 32. DEPT 1013 RODUCTION pumping — Size of the s	30. N SIZE 2-7/81 ACID, SHOT, IH INTERVAL 1,970! and type pump) Gas — MC	FRACTU	TUBING DEPTH SE 39251 Well Water - Bbi 371	RECORET (Reda D KIND D Status (AMOUNT PULLED AMOUNT PULLED PACKER SET Pump) EZE, ETC. MATERIAL USED 285 WPA Prod. or Shut-in) Gas—Oil Ratio
CASING SIZE CASIN	WEIGHT LB. 1,84 364 TOP (Interval, size and perforate 3-92', 113) Production 100	INER RECORD BOTTOM BOTTOM Mone d number) d with 2, li-li6', li3' action Method (F	SACKS CEME SACKS CEME SACKS CEME Production of the second of the seco	HOLE SIZE 17-1/28 12-1/18 INT SCREE 32. DEPT 6- 1013 RODUCTION pumping - Size of the size of th	30. N SIZE 2-7/81 ACID, SHOT, IH INTERVAL 1,970! and type pump) Gas — MC	FRACTU	TUBING DEPTH SE 39251 Well Water - Bbi 371	RECORET (Reda D KIND D Status (AMOUNT PULLED AMOUNT PULLED PACKER SET Parp) EZE, ETC. MATERIAL USED 285 HPA Prod. or Shut-in)
CASING SIZE CASIN	Interval, size and perforate 3-92', 413.10' Produ Hours Tested 3 Casing Pressur	INER RECORD BOTTOM Bone d number) d with 2, Lib', L3 ction Method (F HP Reda Choke Size e Calculated Hour Rate	SACKS CEME SACKS CEME 75 JHP 06-14 , 1415 Prowing, gas lift, progress Period 24- Oil - Bbl.	HOLE SIZE 17-1/28 12-1/18 INT SCREE 32. DEPT 6- 1013 RODUCTION pumping - Size of the size of th	30. N SIZE 2-7/81 ACID, SHOT, IH INTERVAL 1,970! and type pump) Gas — MC	FRACTU 7000	TUBING DEPTH SE 39251 Well Water - Bbi 371	RECORET (Reda D KIND D	AMOUNT PULLED AMOUNT PULLED PACKER SET Pump) EZE, ETC. MATERIAL USED 285 WPA Prod. or Shut-in) Gas—Oil Ratio
CASING SIZE CASING SIZE 3-3/8* SIZE Perforation Record (5/8* casing 13-22*, 108 First Production of Test (Tubing Press.	WEIGHT LB. 1,84 364 TOP (Interval, size and perforate 3-92', 113 10' Production of the size and perforate 3-92', 113 Casing Pressur (Sold, used for fuel)	INER RECORD BOTTOM Bone d number) d with 2, Lib', L3 ction Method (F HP Reda Choke Size e Calculated Hour Rate	SACKS CEME SACKS CEME 75 JHP 06-14 , 1415 Prowing, gas lift, progress Period 24- Oil - Bbl.	HOLE SIZE 17-1/28 12-1/18 INT SCREE 32. DEPT 6- 1013 RODUCTION pumping - Size of the size of th	30. N SIZE 2-7/81 ACID, SHOT, IH INTERVAL 1,970! and type pump) Gas — MC	FRACTU	TUBING DEPTH SE 3925! IRE, CEMEN AMOUNT AN O gallor Well SA Water — Bbl 371. Test Witnes	RECORET Reda	AMOUNT PULLED AMOUNT PULLED PACKER SET Pump) EZE, ETC. MATERIAL USED 28 HPA Prod. or Shut-in) R Gas—Oil Ratio
CASING SIZE CASIN	WEIGHT LB. 1,84 364 TOP (Interval, size and perforate 3-92', 113) 10' Production of the size and perforate 3-92', 113 Casing Pressur (Sold, used for fuel the size and perforate 3-92')	INER RECORD BOTTOM Bone d number) d with 2, Lib', L3 ction Method (F HP Reda Choke Size e Calculated Hour Rate	SACKS CEME SACKS CEME 75 JHP 06-14 , 1415 Prowing, gas lift, progress Period 24- Oil - Bbl.	HOLE SIZE 17-1/28 12-1/18 INT SCREE 32. DEPT 6- 1013 RODUCTION pumping - Size of the size of th	30. N SIZE 2-7/81 ACID, SHOT, IH INTERVAL 1,970! and type pump) Gas — MC	FRACTU	TUBING DEPTH SE 39251 Well Water - Bbl. 371	RECORET Reda	AMOUNT PULLED AMOUNT PULLED PACKER SET Pump) EZE, ETC. MATERIAL USED 28 HPA Prod. or Shut-in) R Gas—Oil Ratio
CASING SIZE CASING SIZE 3/8* SIZE SIZE Perforation Record (5/8* casing 13-22*, 108 First Production Tubing Press. Disposition of Gas (140* Supply	WEIGHT LB. 1,84 364 TOP (Interval, size and perforate 3-92', 113) 10' Production of the size and perforate 3-92', 113 Casing Pressur (Sold, used for fuel the size and perforate 3-92')	INER RECORD BOTTOM Bone d number) d with 2, Lib', L3 ction Method (F HP Reda Choke Size e Calculated Hour Rate	SACKS CEME SACKS CEME 75 JHP 06-14 , 1415 Prowing, gas lift, progress Period 24- Oil - Bbl.	HOLE SIZE 17-1/28 12-1/18 INT SCREE 32. DEPT 6- 1013 RODUCTION pumping - Size of the size of th	30. N SIZE 2-7/81 ACID, SHOT, IH INTERVAL 1,970! and type pump) Gas — MC	FRACTU	TUBING DEPTH SE 3925! IRE, CEMEN AMOUNT AN O gallor Well SA Water — Bbl 371. Test Witnes	RECORET Reda	AMOUNT PULLED AMOUNT PULLED PACKER SET Pump) EZE, ETC. MATERIAL USED 28 HPA Prod. or Shut-in) R Gas—Oil Ratio
CASING SIZE CASING SIZE 3-3/8* SIZE Perforation Record (-5/8* casing (-5/8* and (-5/8*) First Production (-5/8*)	Interval, size and perforate 3-92', 413.10' Produ Hours Tested 3 Casing Pressur (Sold, used for fur	INER RECORD BOTTOM Bone d number) d with 2, Libb', L3 Choke Size e Calculated Hour Rate	SACKS CEME SACKS CEME 75 JHPF 05-11 145 Proding, gas lift, proding, product, proding, proding, proding, proding, proding, proding, product, proding, proding, proding, proding, proding, proding, proding, proding, product, product, product, proding, pro	HOLE SIZE 17-1/28 12-1/18 INT SCREE 32. DEPT 6-1013 RODUCTION pumping - Size of the	30. N SIZE 2-7/81 ACID, SHOT, IH INTERVAL 1:910! Gas — MCF WCF	FRACTU / 7000	TUBING DEPTH SE 39251 Well Water — Bbi 371 Test Witnes L. C. S	RECORET (Reda D KIND DE OF OIL G	AMOUNT PULLED AMOUNT PULLED PACKER SET Pump) EZE, ETC. MATERIAL USED 28 HPA Prod. or Shut-in) R Gas—Oil Ratio

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico					Northwestern New Mexico				
T.	Anhy 1163	T.	Canyon	T.	Ojo Alamo	T. .	Penn. "B"		
T.	Salt	T	Strawn	T.	Kirtland-Fruitland	T.	Penn. "C"		
B.		÷	niuka	T.	Pictured Cliffs	T.	Penn. "D"		
T.		T.	Miss	T.	Cliff House	T.	Leadville		
T.	7 Rivers 2834	T,	Devonian	T.	Menefee	T.	Madison		
T.					Point Lookout				
T.	Grayburg	T.	Montoya	T.	Mancos	T.	McCracken		
T.	San Andres 3927	T.	Simpson	T.	Gallup	T.	Ignacio Qtzte		
T.	Glorieta	T.	McKee	Bas	se Greenhorn	T.	Granite		
T.	Paddock	T.	Ellenburger	T.	Dakota	T.			
T.	Blinebry	T.	Gr. Wash	T.	Morrison	T.			
T.	Tubb	T.	Granite	T.	Todilto	T.			
T.	Drinkerd	T.	Delaware Sand	T.	Entrada	T.			
T.	Abo	T.	Bone Springs	T.	Wingate	T.			
T.	Wolfcamp	T.		T.	Chinle	T.			
T.	Penn.	T.		T.	Permian	T.			
T_	Cisco (Bough C)	T.		Т.	Penn. "A"	Ţ.			

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	То	Thickness in Feet	Pormation .
	1163 1300 2130 2580 3927 5015		Red Beds & send Anhy Selt Anhy & Dole. Dolo, send & Anhy Dolo.				- <u>'</u>
· -		. -					
		·					

			•				

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company: ZIA ENERGY Date: 06-08-1989

Location: Grizzell - #2 (on 6-2-89) Grayburg

Specific Gravity: 1.010
Total Dissolved Solids: 14045
pH: 7.90
IONIC STRENGTH: 0.260

CATIONS:		me/liter	mg/liter
Calcium	(Ca+2)	8.00	160
Magnesium	(Mg^{+2})	30.8	374
Sodium	(Na+1)	187	4310
Iron (total)	(Fe ^{+ 2})	0.83	1 23.2
Barium	(Ba+2)	0.00	1 0.100
ANIONS:			
Bicarbonate	$(HCO_3 - 1)$	32.8	2000
Carbonate	$(CO_3 - 2)$	0	0
Hydroxide	(OH-1)	0	0
Sulfate	(SO ₄ - 2)	27.1	1300
Chloride	(C1-1)	166	5900
DISSOLVED GASES			
Carbon Dioxide	(CO ₂)		40.0
Hydrogen Sulfide	(H ₂ S)		136

	<u>SCALING</u>	INDEX	(positive	value indicate	s scale)
				Calcium	Calcium
Tempe	rature			<u>Carbonate</u>	Sulfate
86°F	30.C			1.2	-31

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company: ZIA ENERGY Date: 05-17-1989

Location: Stitcher #1 (on 5-12-89) Paddock

Specific Gravity: 1.045
Total Dissolved Solids: 63605
pH: 7.60
IONIC STRENGTH: 1.236

CATIONS: Calcium Magnesium Sodium Iron (total) Barium	(Ca ^{+ 2}) (Mg ^{+ 2}) (Na ^{+ 1}) (Fe ^{+ 2}) (Ba ^{+ 2})	me/liter 128 92.0 879 0.716 0.003	mg/liter 2560 1120 20200 20.0 0.200
ANIONS: Bicarbonate Carbonate Hydroxide Sulfate Chloride	(HCO ₃ - 1)	4.40	268
	(CO ₃ - 2)	0	0
	(OH-1)	0	0
	(SO ₄ - 2)	51.0	2450
	(Cl-1)	1040	37000

	SCALING	INDEX	(positive	value	indicates	scale)
				Cá	alcium	Calcium
Temper	ature			Car	rbonate	<u>Sulfate</u>
86'F	30°C				0.78	-10

Unichem International

707 North Leech

P.O.Box 1

Hobbs, New Mexico 88240

Company: ZIA ENERGY Date: 05-17-1989

Location: Brunson #4 (on 5-12-89) San Andres

Specific Gravity: 1.008
Total Dissolved Solids: 11788
pH: 7.90
IONIC STRENGTH: 0.194

CATIONS: Calcium Magnesium Sodium Iron (total)	(Ca ^{+ 2}) (Mg ^{+ 2}) (Na ^{+ 1}) (Fe ^{+ 2})	me/liter 4.60 12.6 168 3.40	mg/liter 92.0 153 3860 95.0
Barium	(Ba ^{+ 2})	0.006	0.400
ANIONS:			
Bicarbonate	(HCO ₂ - 1)	44.0	2680
Carbonate	(CO ₃ = 2)	0	0
Hydroxide	(OH-1)	0	0
Sulfate	(SO ₄ - 2)	0	0
Chloride	(Cl-1)	141	5000

	<u>SCALING</u>	INDEX	(positive	<u>value</u>	indicate	s scale)
				Ca	alcium	Calcium
Temper	rature			Car	cbonate	Sulfate
86°F	30°C				1.2	-39

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company: ZIA ENERGY Date: 06-08-1989

Location: Grizzell - #1 (on 6-2-89) Blinebry

Specific Gravity:	<u>Sample 1</u> 1.105
Total Dissolved Solids:	146728
pH:	6.17
IONIC STRENGTH:	3.281

CATIONS:		me/liter	mg/liter
Calcium	(Ca ^{+ 2})	432	8640
Magnesium	(Mg ^{+ 2})	768	9330
Sodium	(Na ⁺¹)	1470	33700
Iron (total)	(Fe ^{+ 2})	1.74	48.7
Barium	(Ba ^{+ 2})	0.013	0.900
ANIONS:			
Bicarbonate	(HCO ₃ - 1)	3.60	220
Carbonate	(CO ₃ - 2)	0	0
Hydroxide	(OH-1)	0	0
Sulfate	(SO ₄ - 2)	38.5	1850
Chloride	(Cl-1)	2620	93000
DISSOLVED GASES			
Carbon Dioxide	(CO ₂)		110
Hydrogen Sulfide	(H ₂ S)		0

	<u>SCALING</u>	INDEX	(positive	<u>value</u>	<u>indicates</u>	scale)
				Cá	alcium	Calcium
Tempe:	rature			Can	rbonate	Sulfate
86 ° F	30°C				0.22	9.4

P.O. BOX 1499

707 NORTH LEECH STREET

HOBBS, NEW MEXICO 88240

Zia Energy, Inc.
Application For SWD Well
Simmons No. 2
SW-NE 5-22S-37E
Lea County, New Mexico

 Zia Energy, Inc.
 Report Date:
 April 22, 1991

 Box 2219
 Lab In Date:
 April 11, 1991

 Hobbs
 , NM 88240
 Sample Date:
 April 11, 1991

Dear Brian Neison

Listed below please find our water analysis report from Simmons

, #1 Tubb

Specific Gravity: 1.018
Total Dissolved Solids: 24829
PH: 6.80
Ionic Strength: .498

.....

mg/liter CATIONS: Calcium: (Ca++) 1760 Magnesium: (Mg++) 437 7106 Sodium: (Na+) Iron (Total) (Fe++) 5.80 Barium (Ba++) .80 0.00 Manganese: (Mn++)

Resistivity:

ANIONS:

 Bicarbonate:
 (HCO3-)
 220

 Carbonate:
 (CO3--)
 0

 Hydroxide:
 (OH-)
 0

 Sulfate:
 (SO4--)
 307

 Chloride:
 (Cl-)
 15000

......

GASES:

 Carbon Dioxide:
 (CO2)

 Oxygen:
 (O2)

 Hydrogen Sulfide:
 (H2S)

......

SCALE INDEX (Positive Value Indicates Scale Tendency) * indicates tests were not run.

Temperature		CaCO3 SI	CaSO4 SI
86F	30.0C	09	-29.65
104F	40.0C	. 16	-29.91
122F	50.0C	.41	-30.17
140F	60.0C	. 69	-29.65
168F	70.0C	1.02	-28.61
176F	80.0C	1.36	-27.01

If you have any questions or require further information, please contact us.

Sincerely.

bc: Joe Hay John Offutt

cc:

P.O. BOX 1499

707 NORTH LEECH STREET

HOBBS, NEW MEXICO 88240

Zia Energy, Inc.
Application For SWD Well
Simmons No. 2
SW-NE 5-22S-37E
Lea County, New Mexico

Zia Energy, Inc	,	Report Date:	April 22, 1991
Box 2219		Lab In Date:	April 11, 1991
Hobbs	, NM 88240	Sample Date:	April 11, 1991

Dear Brian Nelson

				<u></u>
	Specific Gravity:		1.102	ŧ
	Total Dissolved Sol	ids:	142825	
	PH:		7.20	
	Ionic Strength:		2.782	
			/1.	
ATIONS:			mg/liter	
	Calcium:	(Ca++)	7360	
	Magnesium:	(Mg++)	2333	
	Sodium:	(Na+)	44485	
	Iron (Total)	(Fe++)	31.00	
	Barium	(Ba++)	. 20	
	Manganese:	(Mn++)	0.00	
	Resistivity:			
NIONS:	•			
	Bicarbonate:	(HCO3-)	146	
	Carbonate:	(CO3)	0	
	Hydroxide:	(OH-)	0	
	Sulfate:	(\$04)	501	
	Chloride:	(C1-)	88000	

ASES:	Allen Admida.	(000)	****	
	Carbon Dioxide:	(CO2)	*****	
	Oxygen:	(02)	*****	
	Hydrogen Sulfide:	(H2S)	*****	

SCALE INDEX (Positive Value Indicates Scale Tendency) * indicates tests were not run.

Temperature		CaCO3 SI	CaSO4 SI
86F	30.0C	. 82	-21.09
104F	40.0C	1.03	-20.90
122F	50.0C	1.30	-20.43
140F	60.0C	1.60	-20.04
168F	70.0C	1.93	-20.03
176F	80.0C	2.31	-20.31

If you have any questions or require further information, please contact us.

Laboratory Technician

CC:

bc: Joe Hay John Offutt

P.O. BOX 1499

707 NORTH LEECH STREET

HOBBS, NEW MEXICO 88240

Zia Energy, Inc.
Application For SWD Well
Simmons No. 2
SW-NE 5-22S-37E
Lea County, New Mexico

May 30, 1991 Zia Energy, Inc. Report Date: Box 2219 Lab In Date: May 20, 1991 , NM 88240 Sample Date: May 20, 1991 Hobbs Dear Brian Nelson Listed below please find our water analysis report from Flower , #1 Specific Gravity: 1.002 Total Dissolved Solids: 7.70 Ionic Strength: mg/liter CATIONS: Calcium: (Ca++) 68 Magnesium: (Mg++) 85 Sodium: (Na+) 678 Iron (Total) (Fe++) 14.50 (Ba++) .70 Barium .03 Manganese: (Mn++) Restivity: ANIONS: (HCO3-) Bicarbonate: 268 Carbonate: (CO3--)0 Hydroxide: (OH-) 0 Sulfate: (504--)78 (C1-)Chloride: 1200 GASES: Carbon Dioxide: (CO2) ***** Oxygen: (02)***** Hydrogen Sulfide: (H2S) ***** SCALE INDEX (Positive Value Indicates Scale Tendency) * indicates tests were not run.

Temperature		CaCO3 SI	CaSO4 SI
86F	30.0C	.36	-27.17
104F	40.0C	.68	-27.50
122F	50.0C	.83	-27.50
140F	60.0C	. 96	-27.17
168F	70.0C	1.19	-26.14
176F	80.0C	1.39	-24.71

If you have any questions or require further information, please contact us.

Laboratory Technician

bc: Joe Hay John Offutt

cc:

P.O. BOX 1499

Zia Energy, Inc.

707 NORTH LEECH STREET

May 30, 1991

Report Date:

HOBBS, NEW MEXICO 88240

Zia Energy, Inc.
Application For SWD Well
Simmons No. 2
SW-NE 5-22S-37E
Lea County, New Mexico

Lab In Date: May 20, 1991 Box 2219 Sample Date: May 20, 1991 Hobbs , NM 88240 Dear Brian Nelson Listed below please find our water analysis report from Henson , #1 1,002 Specific Gravity: Total Dissolved Solids: 2691 PH: 7.80 Ionic Strength: .060 CATIONS: mg/liter Calcium: (Ca++) 156 173 Magnesium: (Hg++)Sodium: (Na+) 542 {Fe++} Iron (Total) 1.50 (8a++) .70 Barium Manganese: (Mn++).05 Restivity: ANIONS: (HCO3-) Bicarbonate: 268 $\{C03--\}$ Carbonate: 0 0 Hydroxide: (OH-)Sulfate: (\$04--)352 Chloride: (c1-)1200 GASES: Carbon Dioxide: (CO2) ***** (02)***** Oxygen: (H2S) ***** Hydrogen Sulfide:

SCALE INDEX (Positive Value Indicates Scale Tendency) * indicates tests were not run.

Temperature		CaCO3 SI	CaSO4 SI
86F	30.0C	.17	-23.41
104F	40.0C	1.10	-23.80
122F	50.0C	1.26	-23.80
140F	60.0C	1.40	-23.41
168F	70.0C	1.63	-22.36
176F	80.0C	1.84	-20.85

If you have any questions or require further information, please contact us.

Laboratory Technician

cc:

bc: Joe Hay John Offutt LEGAL NOTICE May 36, 1991

May 36, 1991
Zia Energy, Inc. whose address is P.O. Box 2219, Mobbs, NM 88241, whose telephone number is 305-393-2937 and whose contact person is Farris Melson, hereby advertises that Zia Energy, Inc. has fied with the New Mexico it Conservation Division in application for Administrative Approval for our proposed Salt Water Disposal well, which will be the Simmons No. 2 well located in the \$W/4-NE/4

of Section 5, Township 22 South, Range 37 East, Lea County, New Mexico. It is proposed that produced water from surrounding oil and gas leases will be injected into the San Andres formation at a depth to be below 4450 feet from the surface, with expected maximum injection rate not to exceed 3,500 barrels of water per day and max-imum expected injection pressure to be 500 psi.

Any interested party must file objections or re-quests for a hearing within 15 days of this date with the New Mexico Oil Conservation Division P.O, Box 2088, Santa Fe, NM 87501.

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

JUN 14 11 9 24 OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

June 6, 1991

BRUCE KING GOVERNOR

/ed

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88241-1980 (505) 393-6161

OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501
RE: Proposed: MC DHC NSL NSP SWD WFX PMX
Gentlemen:
I have examined the application for the: Zia Energy, and Simmond #2-1/5-22-37 Operator Lease & Well No. Unit S-T-R
and my recommendations are as follows:
Yours very truly,
Jerry Sexton Supervisor, District 1