CORPORATION

20 North Broadway, Suite 1500 Oklahoma City, Oklahoma 73102-8260 Telephone:405/235-3611 FAX 405/552-4550

June 3, 1997

State of New Mexico **Oil Conservation Division** 2040 South Pacheco Santa Fe, New Mexico 87505

Attention: Michael E. Stogner

Re:

Unorthodox Locations Turner 'B' 134, 135, 136 Section 20-T17S-R31E Eddy County, New Mexico

Gentlemen:

Devon Energy Corporation (Nevada), as operator of the Turner 'B' Waterflood Project, respectfully requests the Oil Conservation Division grant administrative approval of the following unorthodox locations, under the provisions of the Division general rule 104.F(1):

Turner 'B' 134 Turner 'B' 135 Turner 'B' 136 1350' FNL and 85' FEL Section 20-T17S-R31E 2650' FNL and 85' FEL Section 20-T17S-R31E 1521' FSL and 146' FEL Section 20-T17S-R31E

As reflected on the attached plat, our proposed unorthodox locations are necessary to permit the completion of an efficient production and injection pattern within the Turner 'B' Waterflood Project and the Skelly Waterflood Unit to the east as operated by the Wiser Oil Company.

Devon and Wiser have entered into a lease line development agreement covering the referenced locations, as well as additional lease line producers to be operated by Wiser which shall be the subject of further applications to be submitted by Wiser.

Attached, you will find (1) a land plat reflecting Wiser to be the only offset operator, (2) Wiser's approval of our locations, and (3) Bureau of Land Management approval of our APD.

Inasmuch as we have received a waiver from the only offset operator, we would further request that the Commission waive the applicable twenty (20) day notice period.

Feel free to contact me at (405)-552-4633 if additional information is required.

Yours very truly,

DEVON ENERGY CORPORATION (NEVADA)

Here w/ Ken buy to Here w/ Ken buy 1 leone hig agreement w/ Aunothing agreement in mille

Ken Grav District Landman

KG:cj\StateNM.lt Enclosure

OCVON ENERGY CORPORATION

20 North Broadway, Suite 1500 Oklahoma City, Oklahoma 73102-8260 Tolophone:405/235-3611 FAX 405/552-4550

June 3, 1997

JUN 0 5 1997

The Wiscr Oil Company 8115 Preston Road, Suite 400 Dallas, TX 75225

Attention: Lauri Block

Re: Unorthodox Locations Turner 'B' 134, 135, 136 Section 20-T17S-R31E Eddy County, New Mexico

Gentlemen:

Devon Energy Corporation (Nevada), as operator of the Turner 'B' Waterflood Project, shall apply to the New Mexico Oil Conservation Division for administrative approval of the following unorthodox well locations.

Turner 'B' 134	1350' FNL and 85' FEL Section 20-T17S-R31E
Turner 'B' 135	2650' FNL and 85' FEL Section 20-T17S-R31E
Turner 'B' 136	1521' FSL and 146' FEL Section 20-T17S-R31E

Attached, you will find a copy of our application to the New Mexico Oil Conservation Division. In accordance with Article 7 of our Cooperative Unit Line Injection Well and Unit Line Infill Drilling Agreement effective January 1, 1997, please indicate your waiver, as the offset operator, of the above unorthodox locations by signing and returning one copy of this letter as soon as possible.

Yours very truly,

DEVON ENERGY CORPORATION (NEVADA)

Ken Grav

District Landman

Agreed to accept this 17th day of June 1997.

THE WISER OIL COMPANY By: Name: aglestor Title:

KG:cj\wieser3.h Enclosure

Form 3160-3 (December 1990) DEPARTMENT O	STATES F THE INTERI	SUBMIT IN TRIPLIC OR (See other instructions on reverse side)		Form approved.	
BUREAU OF LAN	ID MANAGEMENT PE	RATOR'S COPY	LC 0293	DESIGNATION AND SE 395-B	RIAL NO.
APPLICATION FOR PERMIT	TO DRILL OR DEEPEN		1	IAN, ALLOTTEE OR T	RIBE NAME
la TYPE OF WORK: DRILL	DEEPEN		- NA		
b TYPE OF WELL:		NULTIPLE ZONE	NA	GREEMENT NAME	<u></u>
2 NAME OF OPERATOR DEVON ENERGY CORPO	RATION			R LEASE NAME, WELL *B" #134	NO.
3. ADDRESS AND TELEPHONE NO. 20 N. BROADWAY, SUITE	1500, OKC, OK 73102	(405) 552-4560	9.API WE		
4. LOCATION OF WELL (Report location clearly and in acc At surface 1350' FNL & 85' FEL UHORTH At top proposed prod. zone (SAME)	ordance with any State requir DOSL LOCATION	rements)* Subject to Like Approval By State	GRAYB	AND POOL, OR WILD URG-JACKSON I.,R.,M., OR BLOCK DN 20 -T17 S - R31	AND SURVEY OR AREA
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR 5.5 miles East & 1 mile North of Loco Hills, N.M.	POST OFFICE*	RECEIVED '	12. COUN EDDY	TY OR PARISH	13. STATE NM
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 85' (Also to pearst drig, unit line if any)	16.NO. OF ACRES IN LEASE 1786.15	APR 21 17		17.NO. OF ACRES TO THIS WELL 40	ASSIGNED
18.DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 853'	19. PROPOSED DEPTH 4200'	BLM		20.ROTARY OR CA Rotary	-
21. ELEVATIONS (Show whether DF, RT, GR, etc.) GR=3722'		ROSWELL, NM		APPROX. DATE WORK 1 e 1, 1997	WILL START.

23.					
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	
12 1/4"	8 5/8" J-55	24.0#	400- 4251	125 sk Lite cmt + 200 sk Class "C"	
7 7/8"	5 1/2" J-55	15.5#	4200'	550 sk Lite cmt + 425 sk Class "H"	

We plan to circulate cement to surface on all casing strings. Devon Energy Corporation proposes to drill to 4200' to test the Grayburg-Jackson formation for commercial quantities of oil. If the Grayburg-Jackson is deemed non-commercial, the wellbore will be plugged and abandoned per Federal Regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments.

Drilling Program		The undersigned accepts all applicable	RECEIVED
Exhibit #2	= Blowout Prevention Equipment = Location and Elevation Plat	terms, condition, stipulations and restrictions concerning operations	0
		conducted on the leased land or portions	MAY 27 1997
Exhibit #4	= Wells Within 1 Mile Radius	thereof, as described below:	LAND DEPARTMENT
Exhibit #5	= Production Facilities Plat	Lease No. LC029395-B	DIND DEPARIMENT
	= Rotary Rig Layout	Legal Description: Section 20-T17S-R31E	
Exhibit #7	= Casing Design	Bond Coverage: Statewide in CO, NM, UT, & WY	
H2S Operating	Plan	BLM Bond No.: CO1151	

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED Rang Jackson		JDY JACKSON TRICT ENGINEER DATE	4/17/57
(This space for rederat or state onice use)	Representation and the second se		
	Speciel Stiputations	APPROVAL DATE	
application approval does not warrant or certify that the appli CONDITIONS OF APPROVAL, IF ANY:	cant holds legal or equitable title to th	use rights in the subject lease which would	entitle the applicant to conduct operations thereon.
. PPROVED BY Fory & Higue	TITLE <u>A</u> See Instructions O		DATE 5/22/97

itle 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent atements or representations as to any matter within its jurisdiction

Form 3160-3 (December 1990)	DEPAR		D STATES OPER OF THE INTERIO	· · · · · ·	∆TE•	Form approved	
•	BL	IREAU OF L	AND MANAGEMENT			E DESIGNATION AND S 29395-B	ERIAL NO.
	APPLICATI	ON FOR PERI	WIT TO DRILL OR DEEPEN			NDIAN, ALLOTTEE OR	IRIBE NAME
la TYPE OF WORK		X	DEEPEN		NA		
h TYPE OF WELL	9AE (7)	Other			7.UNII NA	ACREEMENT NAME	
2 NAME OF OPER	ATOR DEVON EN	ERGY COR				or lease name, weller "B" #135	L NO.
3. ADDRESS AND	TELEPHONE NO.		TE 1500, OKC, OK 73102	(405) 552-4560	9.API	WELL NO.	
	WELL (Report locatio	on clearly and in	accordance with any State require		GRAM	LD AND POOL, OR WILL BURG-JACKSON	•
At top proposed pr	od. zone (SAME)		Subject to Like Approval			., t., r., m., or block ION 20 -T17 S - R3	
14.DISTANCE IN MILE 5.5 miles East &	and direction from the second	m nearest town dco Hills, N.N.	OR POST OFFICE		12. CO EDDY	UNTY OR PARISH	13. STATE NM
15. DISTANCE FROM PR LOCATION TO NEAR PROPERTY OR LEAS	est E line, Ft.	85'	16.NO. OF ACRES IN LEASE 1786.15			17.NO. OF ACRE: TO THIS WELL 40	
	OPOSED LOCATION* DRILLING, COMPLETE ON THIS LEASE, FT.		19. PROPOSED DEPTH 4200'			20. ROTARY OR C Rotary	ABLE TOOLS*
21.ELEVATIONS (Show) GR=3738'	whether DF, RT, GR, etc.)				1	. APPROX. DATE WORK INC 1, 1997	WILL START*
23.			PROPOSED CASING AND C			······································	
SIZE OF HOLE	GRADE, SI	E OF CASING	WEIGHT PER FOOT	SETTING DEPTH		QUANTIT	Y OF CEMENT
12 1/4"	8 5/8" J-55		24.0#	ADO 425'		125 sk Lite cmt +	
7 7/8"	5 1/2" J-55		15.5#	4200'		550 sk Lite cat +	425 sk Class "H"

We plan to circulate cement to surface on all casing strings. Devon Energy Corporation proposes to drill to 4200' to test the Grayburg-Jackson formation for commercial quantities of oil. If the Grayburg-Jackson is deemed non-commercial, the wellbore will be plugged and abandoned per Federal Regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments.

Drilling Progra	<u>m</u>	The undersigned accepts all applicable	
Exhibits #1/1-A	= Blowout Prevention Equipment	terms, condition, stipulations and	DEODU
Exhibit #2	= Location and Elevation Plat	restrictions concerning operations	RECEIVED
Exhibit #3/3-A	= Road Map and Topo Map	conducted on the leased land or portions	MAN
Exhibit #4	= Wells Within 1 Mile Radius	thereof, as described below:	MAY 27 1997
Exhibit #5	= Production Facilities Plat	Lease No. LC029395-B	
Exhibit #6	= Rotary Rig Layout	Legal Description: Section 20-T17S-R31E	LAND DEPARTMENT
Exhibit #7	= Casing Design	Bond Coverage: Statewide in CO, NM, UT, & WY	
32S Operating	Plan	BLM Bond No.: CO1151	

ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED Camp Jockson	RANDY JACKSON TITLE DISTRICT ENGINEER DATE 4/17/57
his space for Federal or State office use)	Approval Subject to General Requirements and
RMIT NO	Special Stiputitions APPROVAL DATE
lication approval does not warrant or certify that the ap NDITIONS OF APPROVAL, IF ANY:	opli AR DELTRY I or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
ROVED BY FENZ I HIGH	on TITLE ADM Minual DATE 5/22/97
V V	See Instructions On Reverse Side
IXIIXC Section 1001 makes it a onima for any	and a language of the language of the second s

18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent nents or representations as to any matter within its jurisdiction

Form 3160-3 (December 1990)		O STATESOPERA OF THE INTERIC	TOKS COPY SUBMIT IN TRIPLICA	TE•	Form approved.	
	BUREAU OF LA	AND MANAGEMENT	·		E DESIGNATION AND SER 9395-B	IAL NO.
		IT TO DRILL OR DEEPEN	-	6.IF II NA	NDIAN, ALLOTTEE OR TR	THE NAME
la TYPE OF WORK:	DRILL 🔀	DEEPEN		7.UNIT	AGREEMENT NAME	
b. TYPE OF WELL:	oas Other	SINGLE ZONE	MULTIPLE ZONE	NA		
2 NAME OF OPERA	ATOR DEVON ENERGY CORF	ORATION			OR LEASE NAME, WELL : r "B" #136	NO.
3. ADDRESS AND T	FELEPHONE NO.	FE 1500, OKC, OK 73102	(405) 552-4560	9.API W	FIL NO.	
At surface 152 At top proposed pro-	ELL (Report location clearly and in a 1' FSL & 146' FEL UNOR-TH d. zone (SAME)	Cordance with any State require Doy Location Subject to Liko Approval	ments)*	GRAY	D AND POOL, OR WILDCI BURG-JACKSON T., R., M., OR BLOCK AN ION 20 -T17 S - R31 I	D SURVEY OR AREA
14. DISTANCE IN MILES 5.5 miles East & 0.	AND DIRECTION FROM NEAREST TOWN 1 mile North of Loco Hills, NN	OR POST OFFICE		12. COL EDDY	NTY OR PARISH	13. STATE NM
15. DISTANCE FROM PRO LOCATION TO NEARE: PROPERTY OR LEASE (Also to nearest drig, unit	ST LINE, FT. 146'	16.NO. OF ACRES IN LEASE 1786.15	1		17.NO. OF ACRES A TO THIS WELL 40	USIGNED
18.DISTANCE FROM PRO	POSED LOCATION* DRILLING, COMPLETED,	19. PROPOSED DEPTH 4200'			20. ROTARY OR CABI	E TOOLS*
GR=3753'		- I			APPROX. DATE WORK WI ne 1, 1997	LL START•
23.		PROPOSED CASING AND C	EMENTING PROGRAM			
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH		QUANTITY	OF CEMENT
12 1/4"	8 5/8" J-55	24.0#	408- 425'		125 sk Lite cmt + 20	0 sk Class "C"
7 7/8"	5 1/2" J-55	15.5#	4200'		550 sk Lite cmt + 42	5 sk Class "H"
We plan to circu	l ulate cement to surface on al	I casing strings. Devon	I Energy Corporation pror	l oses to	drill to 4200' to to	est the

Grayburg-Jackson formation for commercial quantities of oil. If the Grayburg-Jackson is deemed non-commercial, the wellbore will be plugged and abandoned per Federal Regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments.

The undersigned accepts all applicable

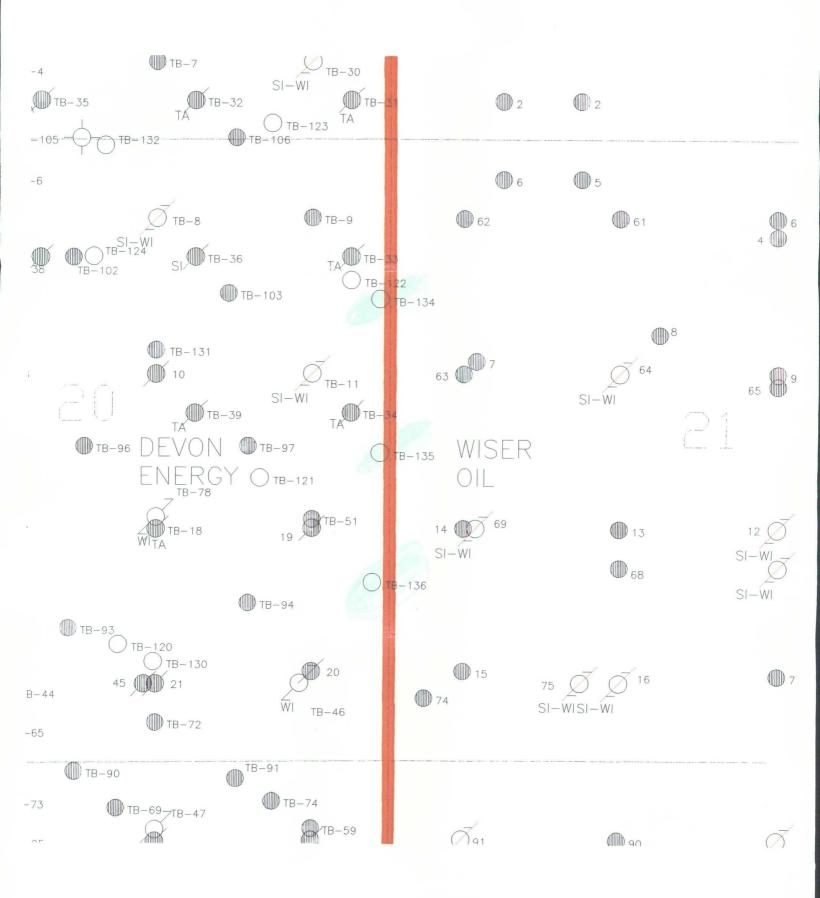
•	D	r	1	U	ĺ	n	g	P	r	0	g	r	am	

Exhibits #1/1-A = Blowout Prevention Equipmen	t terms, condition, stipulations and
Exhibit #2 = Location and Elevation Plat	restrictions concerning operations
Exhibit #3/3-A = Road Map and Topo Map	conducted on the leased land or portions
Exhibit #4 = Wells Within 1 Mile Radius	thereof, as described below:
Exhibit #5 = Production Facilities Plat	Lease No. LC029395-B
Exhibit #6 = Rotary Rig Layout	Legal Description: Section 20-T17S-R31E
Exhibit #7 = Casing Design	Bond Coverage: Statewide in CO, NM, UT, & WY
H2S Operating Plan	BLM Bond No.: CO1151

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED Dand Jockon	TITLE	RANDY JACKSON DISTRICT ENGINEER	DATE <u>4117/57</u>
*(This space for Federal or State office use)	Approval Subject to Strangel Enguirement		
PERMIT NO.	Since States	APPROVAL DA	TE
Application approval does not warrant or certify that the CONDITIONS OF APPROVAL, IF ANY:	applicant hands legal or equitable tit	le to those rights in the subject lease w	which would entitle the applicant to conduct operations thereon
APPROVED BY Form R Jerg	More TITLE	ADM Minera ions On Reverse Side	<u>DATE 5/2.2/47</u>
Title 18 U.S.C. Section 1001, makes it a crime for any	person knowingly and willfully to	o make to any department or agency	of the United States any false, fictitious or fraudulent

The 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction



STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 10290 Order No. R-3528-A

APPLICATION OF AVON ENERGY CORPORATION FOR AMENDMENT OF DIVISION ORDER NOS. R-3185, R-3185-A AND R-3528 TO EXPAND THE VERTICAL LIMITS AND TO ESTABLISH AN INJECTION PRESSURE LIMITATION FOR THE TURNER "B" LEASE WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

See Alco Denter Nor

R-3185 R-3185-A R-3528

ORDER OF THE DIVISION

BY THE DIVISION:

÷ ģ

This cause came on for hearing at 8:15 a.m. on August 8, 1991, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 23rd day of September, 1991, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) By Order No. R-3185, dated February 1, 1967, the Division authorized Sinclair Oil & Gas Company to institute three waterflood projects, the Russel Grayburg-Jackson Waterflood Project, Turner "A" Grayburg-Jackson Waterflood Project, and the Turner "B" Grayburg-Jackson Waterflood Project, said projects comprising all or portions of Sections 17, 18, 19, 20, 29 and 30, Township 17 South, Range 31 East, NMPM, Grayburg-Jackson Pool, Eddy County, New Mexico, by the injection of water into the Grayburg-San Andres formation through two, eight and nine injection wells located within said projects, respectively. CASE NO. 10290 Order No. R-3528-A Page -2-

(3) By Nunc Pro Tunc Order No. R-3185-A, dated February 19, 1968, the Division corrected certain injection well locations authorized by said Order No. R-3185.

(4) By Order No. R-3528, dated October 9, 1968, the Division authorized Sinclair Oil Corporation to expand its Turner "B" Grayburg-Jackson Waterflood Project by the injection of water into the Premier Sand member of the Grayburg formation through twelve injection wells located in Sections 20, 29 and 30, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico, hereinafter referred to as the "Expansion Area".

(5) The current boundaries of the Russel Grayburg-Jackson Waterflood Project, Turner "A" Grayburg-Jackson Waterflood Project, Turner "B" Grayburg-Jackson Waterflood Project (including the "Expansion Area"), and the Grayburg-Jackson Friess-Fren Waterflood Project (also located in said Sections 19 and 30 and approved by Division Order No. R-4306) are as follows:

> Russel Grayburg-Jackson Waterflood Project TOWNSHIP 17 SOUTH, RANGE 31 EAST, NMPM

Section 18: NW/4, W/2 NE/4

Turner "A" Grayburg-Jackson Waterflood Project TOWNSHIP 17 SOUTH, RANGE 31 EAST, NMPM

Section 18: S/2 Section 19: N/2

Turner "B" Grayburg-Jackson Waterflood Project TOWNSHIP 17 SOUTH, RANGE 31 EAST, NMPM

Section 17: NW/4 SW/4, S/2 S/2 Section 20: All Section 29: All Section 30: SE/4

Grayburg-Jackson Friess-Fren Waterflood Project TOWNSHIP 17 SOUTH, RANGE 31 EAST, NMPM

Section 19: E/2 SW/4, SE/4 Section 30: NE/4 CASE NO. 10290 Order No. R-3528-A Page -3-

(6) The Russel Grayburg-Jackson, Turner "A" Grayburg-Jackson, Grayburg-Jackson Friess-Fren and portions of the Turner "B" Grayburg-Jackson Waterflood Projects are currently owned and operated by Socorro Petroleum Company.

(7) The applicant, Avon Energy Corporation, a 50% owner of Socorro Petroleum Company, currently operates a portion of the Turner "B" Grayburg-Jackson Waterflood Project comprising the following described acreage:

TOWNSHIP 17 SOUTH, RANGE 31 EAST, NMPM

Section 20: S/2 N/2, S/2 Section 29: All Section 30: E/2 SE/4

(8) The applicant in this case, Avon Energy Corporation, seeks the following:

- 1) The amendment of Division Order No. R-3528 by expanding the injection interval in the twelve injection wells approved by said order to include the entire Grayburg-San Andres formation;
- 2) The establishment of an injection pressure limitation of 450 psi above the formation fracture pressure as determined from step rate tests for those twelve injection wells located within the "Expansion Area".
- 3) The establishment of an administrative procedure whereby acreage currently contained within the Russel Grayburg-Jackson, Turner "A" Grayburg-Jackson, Turner "B" Grayburg-Jackson, and Grayburg-Jackson Friess-Fren Waterflood Projects may be transferred to Avon Energy Corporation and operated as a single waterflood project.

(9) According to applicant's evidence, Avon Energy Corporation currently has a farmout agreement with Socorro Petroleum Company whereby Avon earns acreage from Socorro as said acreage is drilled or otherwise further developed.

(10) Further evidence presented indicates that all of the acreage within the subject waterflood projects is Federal lands.

CASE NO. 10290 Order No. R-3528-A Page -4-

(11) The transfer and operation of such acreage should result in a more efficient operation, will result in the recovery of additional oil within the projects, and will not violate correlative rights.

(12) According to applicant's evidence and testimony, expansion of the injection interval within those wells located in the "Expansion Area" will result in the recovery of an additional 2.3 million barrels of oil which would not otherwise be recovered, thereby preventing waste.

(13) The proposed expansion of the injection interval within those wells located in the "Expansion Area" should be approved.

(14) The Division has determined, after consultation with the applicant prior to the hearing, that certain "Area of Review" wells located within the "Expansion Area" are not completed in such a manner which will assure that their wellbores will not serve as a conduit for migration of the injected fluid from the proposed injection zone.

(15) Prior to commencing injection operations within one-half mile of any of the following described wells, or prior to injecting into the Turner "B" Well No. 56 located in Unit J of said Section 30, the applicant should be required to perform remedial cement operations or take other action as may be necessary in order to assure that these wellbores will not serve as a conduit for migration of injected fluid to the satisfaction of the supervisor of the Artesia district office of the Division:

Turner "B" No. 55	Unit H, Section 29, T-17S, R-31E
Turner "B" No. 60	Unit K, Section 29, T-17S, R-31E
Turner "B" No. 68	Unit P, Section 29, T-17S, R-31E
Turner "B" No. 71	Unit M, Section 29, T-17S, R-31E

(16) No injection pressure limitation currently exists on any of the injection wells in the subject waterflood projects, however, by virtue of amending the injection interval in those injection wells located within the "Expansion Area", the Division would normally impose a surface injection pressure limitation on those wells equal to 0.2 psi per foot of depth to the uppermost perforations.

(17) The applicant presented the results of step-rate tests conducted on three injection wells within the "Expansion Area". The results of these step rate tests show an average formation fracture pressure of 1208 psi.

CASE NO. 10290 Order No. R-3528-A Page -5-

(18) The applicant's engineering study of pressure limits based upon Frac Hite, Frac Migration, and After Frac Logs (submitted as evidence in this case) provides substantial evidence to demonstrate that injection at 1650 psi (450 psi above the formation parting pressure) will not propagate fractures outside of the vertical limits of the Grayburg-Jackson Pool.

(19) The requested increase in surface pressure limitations for the "Expansion Area" will approximate the surface injection pressure for the original injection wells for which no pressure limit was imposed.

(20) Engineering studies conducted on behalf of the applicant have demonstrated that the water injected into the original injection wells at pressures up to an average of 1870 psi remained confined to the Grayburg-Jackson Pool.

(21) There is no indication that water injected into the original injection wells at pressures higher than those sought by the applicant in this case has moved water outside of the vertical limits of the Grayburg-Jackson Pool.

(22) Applicant's request is similar to the request previously approved by the Division Order R-2268-C for Socorro Petroleum Company and for which no adverse effects have been reported.

(23) Injection into the twelve subject injection wells at a surface injection pressure of approximately 450 psi above formation fracture pressure will allow the recovery of additional oil reserves within the Grayburg-Jackson Pool, thereby preventing waste, will not endanger any fresh water aquifers, and should therefore be approved.

(24) As the reservoir pressure in the "Expansion Area" increases as a result of the injection of water, it will be necessary to periodically increase the surface pressure limitation for the project which should be authorized administratively.

(25) The applicant should be required to submit a request to the Santa Fe and Artesia offices of the Division and to the United States Bureau of Land Management (BLM) for transfer of acreage from the Socorro Petroleum Company operated Turner "A" Grayburg-Jackson, Turner "B" Grayburg-Jackson, Grayburg-Jackson Friess-Fren and Russel Grayburg-Jackson Waterflood Projects into the Avon operated Turner "B" Grayburg-Jackson Waterflood Project. Such request should be in general letter form along with a plat of the projects showing the requested acreage to be transferred. CASE NO. 10290 Order No. R-3528-A Page -6-

IT IS THEREFORE ORDERED THAT:

(1) Division Order Nos. R-3185, R-3185-A and R-3528 are hereby amended authorizing Avon Energy Corporation to inject water into the Grayburg-San Andres formation, Grayburg-Jackson Pool, through the twelve injection wells (previously approved for injection by Order No. R-3528) shown on Exhibit "A" attached hereto located within the "Expansion Area" of the Turner "B" Grayburg-Jackson Waterflood Project comprising all or portions of Sections 20, 29 and 30, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico.

(2) The twelve subject injection wells or pressurization system shall be equipped with a pressure limiting device which will limit the surface injection pressure on said wells to no more than 1650 psi.

(3) The Division Director shall have the authority to administratively approve subsequent pressure increases on said wells to 450 psi above fracture pressure, provided, however, that step-rate tests, temperature surveys, tracer surveys or other supporting data the Division may deem necessary accompany such requests.

(4) The Division Director shall also have the authority to reduce or rescind said injection pressures should it become apparent that the injected fluid is not being adequately confined to the Grayburg-Jackson Pool.

(5) Prior to commencing injection operations within one-half mile of any of the following described wells, or prior to injecting into the Turner "B" Well No. 56 located in Unit J of said Section 30, the applicant shall perform remedial cement operations or take other action as may be necessary in order to assure that these wellbores will not serve as a conduit for migration of injected fluid to the satisfaction of the supervisor of the Artesia district office of the Division:

Turner "B" No. 55	Unit H, Section 29, T-17S, R-31E
Turner "B" No. 60	Unit K, Section 29, T-17S, R-31E
Turner "B" No. 68	Unit P, Section 29, T-17S, R-31E
Turner "B" No. 71	Unit M, Section 29, T-17S, R-31E

CASE NO. 10290 Order No. R-3528-A Page -7-

S

E

A L

(6) The Division Director may authorize the transfer of acreage currently contained within the Socorro Petroleum Company operated Turner "A" Grayburg-Jackson, Turner "B" Grayburg-Jackson, Grayburg-Jackson Friess-Fren and Russel Grayburg-Jackson Waterflood Projects into the Avon operated Turner "B" Grayburg-Jackson Waterflood Project provided a request for such transfer of acreage is submitted to the Santa Fe and Artesia offices of the Division and to the United States Bureau of Land Management (BLM). Such request shall be in general letter form along with a plat of the projects showing the requested acreage to be transferred.

(7) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

J.

ł

WILLIAM J. LEM Director

_
-
ū.
.
.=
- =
-
-
ü
× .
Ξ.
ο.
_
х.
≏.
-
ŝ
•
-
≏.
-
Ξ.
•

EXHIBIT "A" CASE NO. 10290 DIVISION ORDER NO R-3528-A TURNER "B" GRAYBURG-JACKSON WATERFLOOD PROJECT

٢,

 $\boldsymbol{v} = \boldsymbol{v}_1$

<u>, '</u>

(

(

į

Well Number	Location	Unit	S-T-R	Injection Perforations	Packer Depth	Tubing Size	Injection Pressure
Turner "B" No. 44	660' FSL & 2055' FWL	z	20-17S-31E	TBD*	TBD.	2 3/8	1650
Turner "B" No. 46	660' FSL & 760' FEL	Ρ	20-17S-31E	TBD•	TBD•	2 3/8	1650
Turner "B" No. 47	560' FNL & 1980' FEL	В	29-17S-31E	3045' - 3412'	2945'	2 3/8	1650
Turner "B" No. 50	660' FNL & 660' FWL	D	29-17S-31E	2978' - 3330'	2878'	2 3/8	1650
Turner "B" No. 54	1980' FNL & 1980' FWL	۲.	29-17S-31E	3108' - 3404'	3008'	2 3/8	1650
Turner "B" No. 55	1980' FNL & 660' FEL	Н	29-17S-31E	TBD•	TBD•	2 3/8	1650
Turner "B" No. 56	1980' FSL & 1980' FEL	ſ	30-17S-31E	TBD•	TBD•	2 3/8	1650
Turner "B" No. 61	1980' FSL & 1980' FEL	J	29-17S-31E	3254' - 3646'	3154'	2 3/8	1650
Turner "B" No. 64	1980' FSL & 660' FWL	L	29-17S-31E	3146' - 3557'	3046'	2 3/8	1650
Turner "B" No. 66	660' FSL & 1980' FWL	z	29-17S-31E	3281' - 3678'	3181	2 3/8	1650
Turner "B" No. 68	660' FSL & 660' FEL	ط	29-17S-31E	TBD•	TBD•	2 3/8	1650
Turner "B" No. 76	660' FSL & 660' FEL	Р	30-17S-31E	TBD•	TBD•	2 3/8	1650
		×					

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

CASE No. 3521 Order No. R-3185-A

1 - R-3185

SERV AGE SELECTIONSE enz telenerate?

See Alis Onder Non.

IN THE MATTER OF THE APPLICATION OF SINCLAIR OIL & GAS COMPANY FOR THREE WATERFLOOD PROJECTS, EDDY COUNTY, NEW MEXICO.

		5		-	. O:1				Cedara.	
	ere pro-	مىر يېت مەربىلاردى ت	4. 7. :	3	. 993		-		1.ac. R-3528.	- <u>A</u>
			NUNC	PRO '	FUNC	ORDER		195 -		
	the second s	a second to contra se	rdåå ¹	30						
<u>BY</u>	THE COMMISSI	<u>ON</u> :	1650	, . 					اکنون شرب اس ا اس بهرست کند ا	
	ي يونو ي				NC.	1104	÷	1,21	าลการยุที่ใ	

It appearing to the Commission that through inadvertence, Order No. R-3185, dated February 1, 1967, does not reflect the true and correct locations of certain existing wells which were authorized for conversion to water injection by said order,

IT IS THEREFORE ORDERED: AND A DESCRIPTION OF TRADE

(1) That the following well locations are hereby substituted in lieu of those shown in Order No. R-3185 to correctly reflect the locations of water injection wells authorized by said Order No. R-3185:

Sinclair Russell Grayburg-Jackson Waterflood Project

Injection wells:

C. A. Russell	Well No.	6	990'	FNL & 13	84' FWL	Section 18
C. A. Russell	Well No.	10	2200	FNL & 26	65' FEL	Section 18

Sinclair Turner "A" Grayburg-Jackson Waterflood Project

Injection wells:

Turner "A" SP Well No. 2 2200' FSL & 440' FWL Section 18 Turner "A" SP Well No. 5 330' FNL & 660' FWL Section 19 Turner "A" SP Well No. 6 660' FSL & 1980' FWL Section 18 Turner "A" SP Well No. 9 330' FNL & 1980' FEL Section 19 Turner "A" SP Well No. 10 1980' FSL & 1830' FEL Section 18 Turner "A" SP Well No. 11 660' FSL & 660' FEL Section 18 Turner "A" SP Well No. 15 1650' FNL & 1980' FWL Section 19 Turner "A" SP Well No. 35 1800' FNL & 660' FEL Section 19

-2-CASE No. 3521 Order No. R-3185-A

Sinclair Turner "B" Grayburg-Jackson Waterflood Project

Injection wells:

Turner "B" SP Well No. 3 330' FNL & 660' FWL Section 20 Turner "B" SP Well No. 4 660' FSL & 1980' FWL Section 17 Turner "B" SP Well No. 5 1980' FSL & 660' FWL Section 17 Turner "B" SP Well No. 8 660' FNL & 1980' FEL Section 20 1980' FNL & 660' FEL Turner "B" SP Well No. 11 Section 20 Turner "B" SP Well No. 30 660'FSL & 660'FEL Section 17 Section 20 Turner "B" SP Well No. 41 1650' FNL & 1650' FWL 1650' FSL & 660' FWL Turner "B" SP Well No. 67 Section 20 Turner "B" SP Well No. 78 2080' FSL & 1980' FEL Section 20

(2) That this order shall be effective nunc pro tunc as of February 1, 1967.

DONE at Santa Fe, New Mexico, on this <u>19th</u> day of February, 1968.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

A. L. PORTER, Jr., Member & Secretary

السابية الماسية فالتحالي المنافعة المامية

SEAL

esr/

-3-CASE No. 3521 Order No. R-3185

(2) That the subject waterflood projects shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

<u>PROVIDED HOWEVER</u>, that the Secretary-Director of the Commission may approve expansion of said projects to include such additional lands and injection wells in the area of said projects as may be necessary to complete an efficient water injection pattern.

(3) That monthly progress reports of the waterflood projects herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

A. L. PORTER, Jr., Member & Secretary

SEAL

esr/

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 3521 Order No. R-3185

> > See Mie But Mes.

R-3182-1. R-352-8

R-3528-A

APPLICATION OF SINCLAIR OIL & GAS COMPANY FOR THREE WATERFLOOD PROJ-ECTS, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 25, 1967, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this <u>lst</u> day of February, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Sinclair Oil & Gas Company, seeks authority to institute three waterflood projects in the Grayburg-Jackson Pool by the injection of water into the Grayburg-San Andres formations through two wells on its C. A. Russell Lease, eight wells on its Turner "A" Lease, and nine wells on its Turner "B" Lease in Sections 17, 18, 19, and 20, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico.

(3) That the applicant also seeks an administrative procedure whereby said projects could be expanded to include additional lands and injection wells in the area of said projects as may be necessary in order to complete an efficient injection pattern.

(4) That the wells in each of the project areas are in an advanced state of depletion and should properly be classified as "stripper" wells.

-2- AUTOLIA CONCENSIONO DE MIT EMORIA CASE No. 3521 CONCLUMIN TO STATE SERVICO Order No. R-3185

(5) That the proposed waterflood projects should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) That the subject application should be approved and the projects should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED: 2 SID STALLING TO SOCIALISATION STALLING TO SOCIALISATION STALLING AS I MARKAD

(1) That the applicant, Sinclair Oil & Gas Company, is hereby authorized to institute three waterflood projects in the Grayburg-Jackson Pool by the injection of water into the Grayburg-San Andres formations through the following-described 19 wells in Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico:

NOISSINGO SNE A

Sinclair Russell Grayburg-Jackson Waterflood Project

C. A. Russell Well No. 6 979' FNL & 1400' FWL Section 18 C. A. Russell Well No. 10 10 2147'-FNL & 2374' FWL Section 18 Sinclair Turner "A" Grayburg-Jackson Waterflood Project

Inclair Turner A Grayburg-backson water 1000 110 jecc

Injection wells:

	Turner	"A"	SP	Well	No.	2	2220'	FSL	&	427 '	FWL	Section	18
•	Turner	"A"	SP	Well	No.	5						Section	
	Turner	"A"	SP	Well	No.	ີ 6	568	FSL	&	1707'	FWL	Section	18
	Turner	"A"	SP	Well	No.	9	408 '	FNL	&	1994	** *	Section	
	Turner	"A "	SP	Well	No.	10	1940 '	FSL	&	1839'	FEL	Section	្រុទ
	Turner	"A"	SP	Well	No.	11				655	r start s	Section	
	Turner	"A "	SP	Well	No.	1,5	1635'	FNL	&	1698		Section	
	Turner	"A "	SP	Well	No.	35	700	FEL	Ś.	1840'	FNL	Section	19
			.,.					••••	•	· · · ·			

Sinclair Turner "B" Grayburg-Jackson Waterflood Project

Injection wells:

							10 J	Í			Nam			
	Turner	"B"	SP	Well	No.	3		309'	FNL	&	666	FWL	Section	20
	Turner	"B"	SP	Well	No.		al á	700'	FSL	&.	1751	FWL	Section	17
	Turner	"B"	SP	Well	No.	.		1989 <mark>-</mark>	FSL	&	625'	FWL	Section	17
	Turner	"B "	SP	Well	No.	· <u>.</u> 8	335	504	FNL	&	2064 '	FEL	Section	20
	Turner	"B"	SP	Well	No.	11		1785 '	FNL	&	725'	FEL	Section	20
	Turner	."B"	SP	Well	No.	30		680'	FSL	&	632'	FEL	Section	17
	Turner	"B"	SP	Well	No.	41		1635'	FNL	δ.	1665'	FWL	Section	20
-	Turner	"B"	SP	Well	No.	67							Section	
	Turner	"B."	SP	Well	No.	78		2130'	\mathbf{FSL}	&	1980'	FEL	Section	20

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

ada ana bavanta a bibana abibasi.	್ ಸಮಸ್ಥಿಸಿದ್ದ ಎಕ್ಕೆ ಸಿಟ್ಟ್ ನಿಟ್ಟ್ ಸಿ
IN THE MATTER OF THE HEARING	 An all constitutions and the second se
CALLED BY THE OIL CONSERVATION	
COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:	

Wineman , and stagent file thefores to manique on CASE No. 3885 auto martine in comprehense administration of the second s reur vare of the pression fool troats and the pression ist icanadi 10 felles is scorff of other for a billion is even all yesters a receipt APPLICATION OF SINCLAIR OIL & GAS See Alve Outer Use. COMPANY FOR A WATERFLOOD EXPANSION, 4824 R-3528-A

EDDY COUNTY, NEW MEXICO. 37 F

20

BY THE COMMISSION:

ORDER OF THE COMMISSION

Aders 1 3 SS ST STATES 48 'T compt

R 121 CENCER

12-3185

9-3185-A

This cause came on for hearing at 9 a.m. on October 9, 1968, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 22nd day of October, 1968, the Commission, a quorum being present, having considered the testimony, "the record, and the recommendations of the Examiner, and being fully advised He fel terres in the premises,

الم المركز الم المركز المر المركز المركز

RC 11. Classes for some . . . (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject ion Enmatter thereof. erangen anderen en gandas beel deren

(2) That the applicant, Sinclair Oil Corporation, formerly Sinclair Oil & Gas Company, seeks permission to expand its Turner "B" Grayburg-Jackson Waterflood Project in the Grayburg-Jackson Pool by the injection of water into the Premier Sand of the Grayburg formation through 12 additional injection wells in Sections 20, 29, and 30, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed expansion of the Turner "B" Grayburg-Jackson Waterflood Project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

CASE No. 3885

-2-

10021

Order No. MR-3528 CO HOLTAVEERM O JUD SHT ANDRES DOLXEN WER SO LUXE ORV TO

(5) That the subject application should be approved and the expanded project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

COMPRESSION OF SEVERALLY AND TO P

E.

(1) That the applicant, Sinclair Oil Corporation, formerly Sinclair Oil & Gas Company, is hereby authorized to expand its Turner "B" Grayburg-Jackson Waterflood Project in the Grayburg-Jackson Pool by the injection of water into the Premier Sand of the Grayburg formation through the following-described wells in Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico:

	<u>SE</u>		WELL	NO.	UN	CT 199	SECTI	: <u>ON</u>
Turner Turner	"B" "P"	SP	44	ago na tr mar statum	N P		20 20	•
Turner	"B"	SP	47		В		29	Tino ang
Turner Turner	"B"			art i i i	D F Stansen	···· [24:01	29 29	- 1994 - 201 Annya 2002
Turner Turner			55	thjjis.	H Start J	int produce Lateration	ົ້.29° 	ావం పేశ
Turner.			64	ي مديني الم	L		29 29	
Turner	"B"			a qui. Tata		aren 1966 - K Aren 1966 - K	29	
Turner Turner	ъ "В"	SP	50 76		· P		30	

(2) That the expanded waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the expanded waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION

a la literative de la composition de la

Contact in the second

DAVID F. CARGO, Chairman A. Louis B. Louis Chairman A. Louis B. Louis Chairman A. Louis B. Lo

CHE LAND THE

GUYTON B. HAYS, Member

SEAL

esr/

A. L. PORTER, Jr., Member & Secretary

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 3226 Order No. R-2900

APPLICATION OF SKELLY OIL COMPANY FOR A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 7, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this <u>4th</u> day of May, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Skelly Oil Company, seeks permission to institute a waterflood project in the Grayburg-Jackson Pool in the Dow Unit Area by the injection of water into the Premier (Grayburg) and San Andres formations through six injection wells in Section 22, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

-2-CASE No. 3226 Order No. R-2900

(5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Skelly Oil Company, is hereby authorized to institute a waterflood project in the Grayburg-Jackson Pool in the Dow Unit Area by the injection of water into the Premier (Grayburg) and San Andres formations through the following-described six wells in Section 22, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico:

LEASI WELI	e and L no.	· · · · · · · · · · · · · · · · · · ·	LOCATION UNIT
Lynch	"A"	4	Ъ
Lynch		9	N
Lynch		10	L
Lynch		13	F
Lynch		15	B
Lynch		16	н

(2) That the subject waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

GUYTON B. HAYS, Member

SEAL

A. L. PORTER, Jr., Member & Secretary

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE No. 3547 Order No. R-3214

. . . .

APPLICATION OF SKELLY OIL COMPANY FOR A WATERFLOOD EXPANSION, EDDY COUNTY, NEW MEXICO.

and the second secon

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 5, 1967, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>llth</u> day of April, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That by Order No. R-2900, the Commission authorized the institution of a waterflood project in the Grayburg-Jackson Pool in the Dow Unit Area (now designated Skelly Unit Area) by the injection of water into the Premier (Grayburg) and San Andres formations through six injection wells in Section 22, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico.

(3) That the applicant, Skelly Oil Company, seeks amendment of said Order No. R-2900 to expand the waterflood interval authorized therein to include the entire Grayburg-Jackson producing interval, to permit the conversion to water injection of 18 additional injection wells in Sections 14, 15, 22, 23, 26, and 27, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico, and the establishment of an administrative procedure whereby additional wells, within the said unit area, could be placed on water injection. -2-CASE No. 3547 Order No. R-3214

(4) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(5) That the proposed expansion should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) That approval of the subject application should increase the efficiency of the subject waterflood project, and otherwise prevent waste and protect correlative rights.

(7) That the subject application should be approved and the project as expanded should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

That Order No. R-2900 is hereby amended to read in its entirety as follows:

(1) That the applicant, Skelly Oil Company, is hereby authorized to effect a waterflood project in the Grayburg-Jackson Pool in the Skelly Unit Area by the selective injection of water into various zones throughout the entire Grayburg-Jackson producing interval through the following-described twenty-four wells:

EDDY	COUNTY	NEW MEXIC	0
TOWNSHIP 17	SOUTH, R	ANGE 31 E	AST, NMPM
Well	No.	Unit	Section
		_	•
Skelly Unit	,		14
Skelly Unit	- 22	J.	14
Skelly Unit	- 24	L	14
Skelly Unit	- 34	N	14
Skelly Unit	- 19	F	15
Skelly Unit	- 21	H	15
Skelly Unit	- 26	J	15
Skelly Unit	- 30	N	15
Skelly Unit	- 32	P	15
Skelly Unit	- 42	B	22
Skelly Unit	- 44	F	22
Skelly Unit	- 46	H	22
Skelly Unit	- 52	J	22
Skelly Unit	- 54	L	22
Skelly Unit	- 56	N	22

-3-CASE No. 3547 Order No. R-3214

	EDDY	CO	UNTY	, NEW MEX	ICO		
TOWNSHI	I <u>P 17</u>	<u>s</u> 0	UTH,	RANGE 31	EAST, 1	NMPM	(Cont.)
T.T - 7 7			<u>ــــــــــــــــــــــــــــــــــــ</u>				
Well			No.	Unit	Sect	tion	
Skelly	Unit	-	58	. P	2:	2	
Skelly	Unit	-	38	В	2	3	
Skelly	Unit	-	40	D	23	3 ໌	
Skelly	Unit	-	48	F	23	3	
Skelly	Unit	-	71	J	23	3	
Skelly	Unit		73	L	23	3.	'n
Skelly	Unit	-	83	D	20	6	•
Skelly	Unit	-	85	В	2	7	
Skelly	Unit	-	96	F	2	7	

(2) That the subject waterflood project is hereby designated the Grayburg-Jackson Skelly Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

<u>PROVIDED HOWEVER</u>, that the Secretary-Director of the Commission may approve expansion of the Grayburg-Jackson Skelly Unit Waterflood Project to include additional wells, within said unit area, on water injection as may be necessary to complete an efficient waterflood injection pattern.

(3) That monthly progress reports of the expanded waterflood project authorized herein shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

SEAL

A. L. PORTER, Jr., Member & Secretary

esr/

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 4808 Order No. R-4419

APPLICATION OF SKELLY OIL COMPANY FOR A WATERFLOOD EXPANSION AND DUAL COMPLETION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 4, 1972, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this <u>16th</u> day of October, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Skelly Oil Company, seeks permission to expand its Grayburg-Jackson Skelly Unit Waterflood Project in the Grayburg-Jackson Pool, by the injection of water through its Unit Well No. 114 located in Unit D of Section 14, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico.

(3) That the applicant further seeks authority to complete its Well No. 114 in such a manner as to permit the production of oil from the Fren-Seven Rivers Pool through 2 1/16-inch tubing and the injection of water into the Grayburg-Jackson Pool through a parallel string of 2 1/16-inch tubing with separation of zones by a packer set at approximately 3300 feet.

(4) That the applicant further seeks a procedure whereby the subject waterflood project may be expanded by the dual completion of additional wells within the boundaries of the above-described unit without the necessity for notice and hearing.

(5) That the proposed waterflood expansion and dual completion are feasible and should result in the recovery of otherwise unrecoverable oil, thereby preventing waste. -2-Case No. 4808 Order No. R-4419

·r ·

(6) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection as single completions or as dual completions.

IT IS THEREFORE ORDERED:

(1) That the applicant, Skelly Oil Company, is hereby authorized to expand its Grayburg-Jackson Skelly Unit Waterflood Project in the Grayburg-Jackson Pool by the injection of water through its Unit Well No. 114 located in Unit D of Section 14, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico.

(2) That the applicant is hereby authorized to complete said Well No. 114 in such a manner as to permit the production of oil from the Fren-Seven Rivers Pool through 2 1/16-inch tubing and the injection of water into the Grayburg-Jackson Pool through a parallel string of 2 1/16-inch tubing with separation of zones by a packer set at approximately 3300 feet.

(3) That Order (2) of Order No. R-3214 is hereby amended to read in its entirety as follows:

"(2) That the subject waterflood project is hereby designated the Grayburg-Jackson Skelly Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve expansion of the above-described waterflood project to include such additional injection wells in the area of said project as may be necessary to complete an efficient injection pattern; that said wells may be approved as dual completions for injection into the Grayburg-Jackson Pool and production from the Fren-Seven Rivers Pool."

(4) That monthly progress reports of the waterflood expansion authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

to be at

-3-Case No. 4808 Order No. R-4419

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

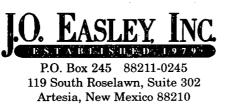
ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

SEAL

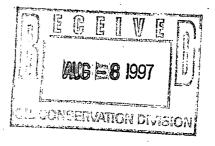
8/28/97





August 5, 1997

Telephone (505) 746-1070 Fax (505) 746-1073



Mr. William Lemay New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

Re: Application for Administrative Approval to Drill a Directional Well to an Unorthodox Bottom Hole Location
 Skelly Unit #402
 Skelly Waterflood Unit
 Eddy County, New Mexico

Dear Mr. Lemay:

The Wiser Oil Company hereby applies for administrative approval to drill a directional well at a surface location of 2625' FNL, 230' FWL, with the bottom hole location at 2625' FNL, 10' FWL, both within Unit E of Section 28, Township 17 South, Range 31 East, N.M.P.M. It is necessary to directionally drill this well as the prime location for drilling a straight hole is inaccessible due to the existence of pipelines, power lines, and a highway R/W running through the prime drillsite.

Attached to this application are the following exhibits:

- Exhibit "A" Survey Plat, Form C-102
- Exhibit "B" Plat showing the section, township, and range in which the well is to be drilled, the project area, the proposed surface & bottom-hole locations, the producing area for the proposed well, & all offsetting drilling units & existing wells
- Exhibit "C" Vertical Plan View (Cross-Section) for the subject well
- Exhibit "D" Horizontal Plan View for the subject well
- Exhibit "E" Type Log Section which is generally representative of the Skelly Unit. Wells have been drilled which have come in right on target as illustrated on this type log from the Caprock Maljamar Unit, but there is a tendency for Skelly Unit wells to come

in anywhere from 200' shallower to an extreme of 1000' shallower than illustrated on these logs.

Exhibit "F" Lease Line agreement between The Wiser Oil Company and Devon Energy Corporation noting in Article 7 that each agrees to execute any waivers necessary to administratively obtain such unorthodox locations at the NMOCD. Devon being the only offset Operator, no Affidavit of Mailing was prepared, however, Devon will be provided a copy of this letter and application.

If you have any questions, or need additional information, please feel free to give me a call at 505-746-1070.

Sincerely,

J. O. EASLEY, INC. Michel R. Bund

Michael R. Burch, CPL Agent for The Wiser Oil Company

Mr. Mike Jones

P. O. Box 2568

The Wiser Oil Company

Hobbs, New Mexico 88241

/bj Enclosures cc/enclosure

Mr. Tim W. Gum New Mexico Oil Conservation Division 811 South 1st Street Artesia, New Mexico 88210

· · · ·

Mr. Matt Eagleston The Wiser Oil Company 8115 Preston Road, Suite 400 Dallas, Texas 75225

Mr. Ken Gray Devon Energy Corporation 20 North Broadway, Suite 1500 Oklahoma City, OK 73102-8260 DISTRICT I

÷

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV P.O. Box 2088, Santa Fe, NM 87504-2088

30-015-

State of New Mexico

. . .

Energy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

OIL CONSERVATION DIVISION P.O. Box 2088

Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Name Pool Code API Number 28509 Grayburg Jackson 7-Rivers QN GB SA

Property Code 017540			S	SKELLY	Property Nam UNIT	le		Well Num	^{aber} 402
OGRID No. 022922			······································	THE	Operator Name WISER OIL (Elevatio 3761	n
	d				Surface Loca			<u></u>	
JL or lot No. Sect	ion Town	nship F	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

E 28 17 S 31 E 2625 NORTH 230 WEST EDDY	UL or lot No.	section	Township	Range	Lot lan	reet from the	Norm/ South me	Feet from the	Last/ west inte	county	1
	E	1 / K	17 S	31 E		2625	NORTH	230	WEST	EDDY	}

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	28	17S	31E		2625	North	10	West	Eddy
Dedicated Acres	Joint o	r Infill Co	nsolidation (Code Or	ler No.				<u> </u>
40									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	I		{
			OPERATOR CERTIFICATION
			I hereby certify the the information
			contained herein is true and complete to the
			best of my knowledge and belief.
2625'			Mill R. Burd
├ - ┤	+ +	-+	Michael R. Burch, CPL
	3759.3' 3762.3'		Printed Name Agent for The Wiser
			Tiue Oil Company
		1	_ 8-4-97
	3756.0' 3754.0'		Date
			SURVEYOR CERTIFICATION
230			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
			supervison, and that the same is true and correct to the best of my belief.
		1	MAY 20, 1997
]	l j	Date Surveyed JLP Signature & Seal of Out
	┝╸╌╴━╴╶╾╺╾╶╾╴┿╶╌╸┍╾╺━╺━ ╎	- + - - - -	Signature & seaf of
		1	1 1 2 1 2 1 1 1 5 6 30-97
			W.O. Num 97-14-1078
			Certificate No
			Certificate No. JOHD W. WEST. 676 PROFESCRONALDE EIDSON, 3239 UNINIMUM GARY G. EIDSON, 12641

T17S - R31E

Skelly Unit #402 Directionally Drilled Well

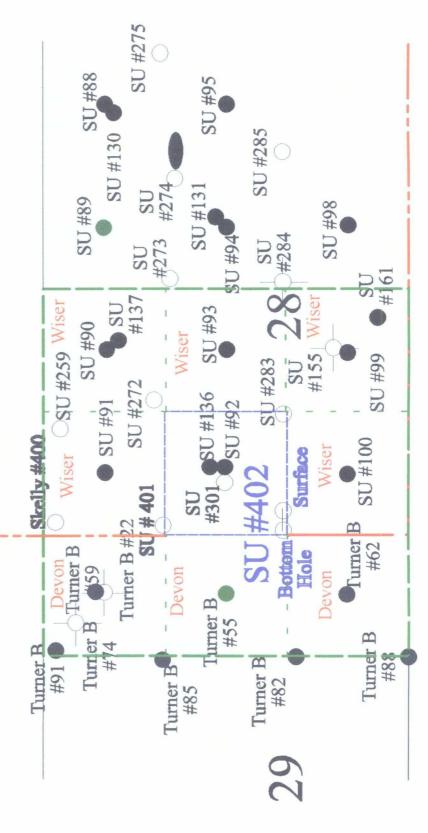
SU #402 Producing Area SU #402 Producing Area

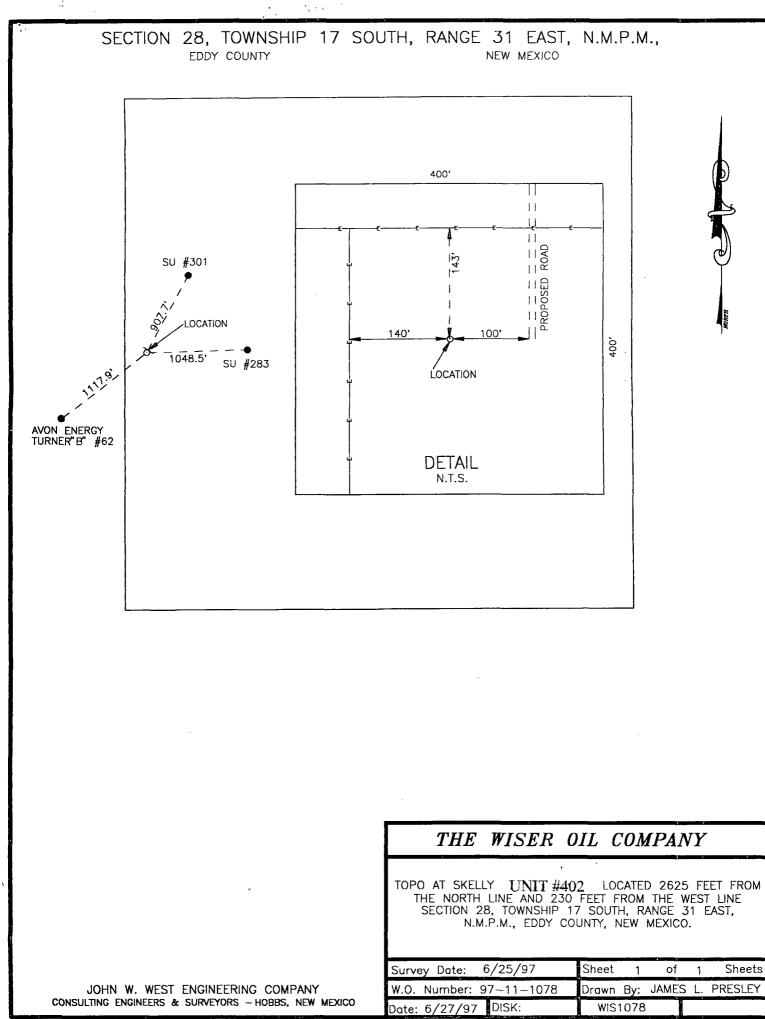
Offset Operators are shown in red (All offset tracts have been drilled)

Existing Water Injection Well

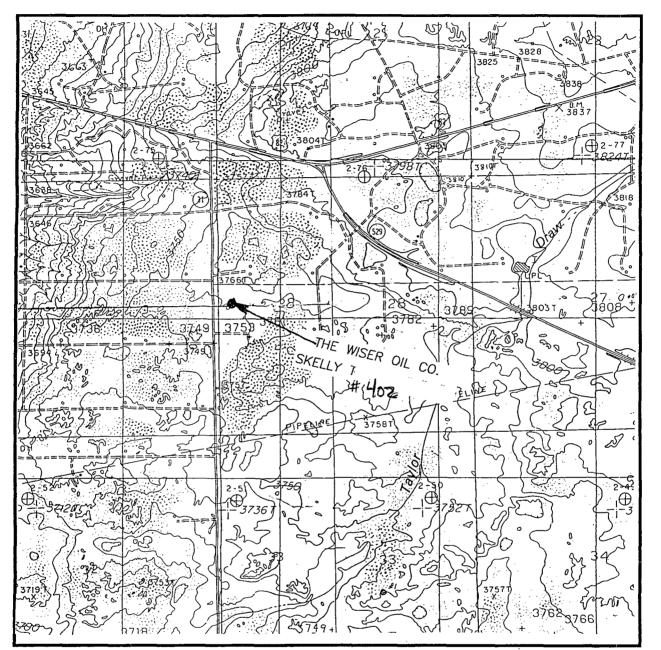
Production Facilities
 New Water Injection Well

- Producing Oil Well
 - A Producing Gas Well
- Producing Oil & Gas Well
- Plugged and Abandoned Well
- Temporarily Abandoned Well





LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

•.`

SEC. _______ RGE. _____ RGE. _____

 SURVEY
 N.M.P.M.

 COUNTY
 EDDY

 DESCRIPTION 2625' FNL & 230' FWL

 ELEVATION
 3761'

 OPERATOR
 THE WISER OIL CO.

 LEASE
 SKELLY

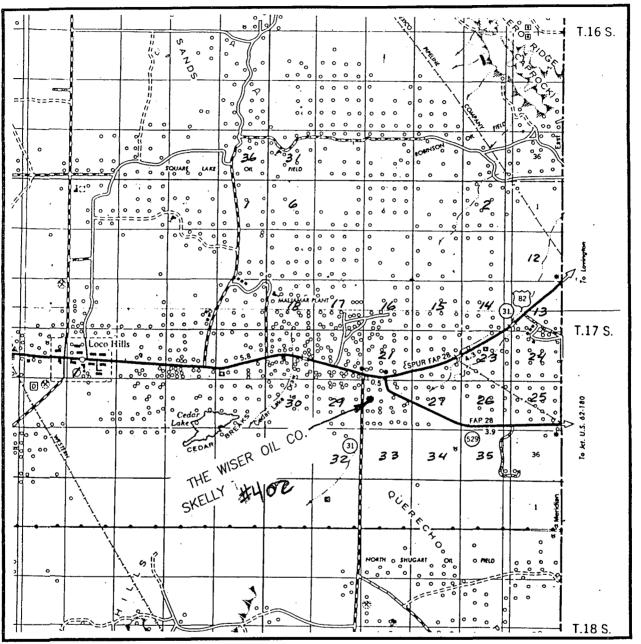
 U.S.G.S. TOPOGRAPHIC MAP

 LOCO HILLS, & MALJAMAR, N.M.

CONTOUR INTERVAL - 10'

JOHN WEST ENGINEERING HOBBS, NEW MEXICO (505) 393-3117 VICINITY MAP

• . •

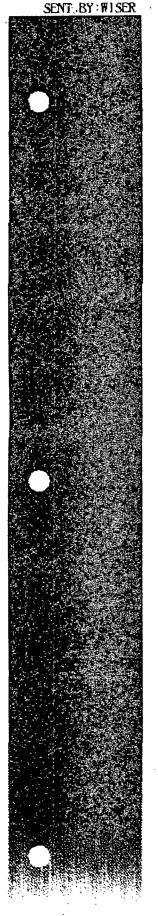


SCALE: 1'' = 2 MILES

SEC. <u>28</u> TWP.<u>17–S</u> RGE.<u>31–E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>EDDY</u> DESCRIPTION <u>2625' FNL & 230' FWL</u> ELEVATION <u>3761'</u> OPERATOR <u>THE WISER OIL CO.</u> LEASE <u>SKELLY</u> ____

:

JOHN WEST ENGINEERING HOBBS, NEW MEXICO (505) 393-3117



0270

DIRECTIONAL WELL PROPOSAL

THE WISER OIL COMPANY SKELLY UNIT #402 SEC. 28, T-17-S, R-31-E EDDY COUNTY, NEW MEXICO

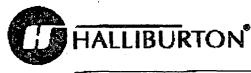
PREPARED FOR: MR. MATT EAGLESTON

PREPARED BY: RICK EATON DIRECTIONAL COORDINATOR

JULY 25, 1997



The Future Is Working Together.



HALLIBURTON ENERGY SERVICES

2822 1-20 West / Odessa, Texas 79763 / Tel: 915-580-0014

July 25, 1997

THE WISER OIL COMPANY

Mr. Matt Eagleston 8115 Preston Rd. Suite 400 Dallas, Texas 75225

Dear Matt,

We appreciate the opportunity to present the following Directional Well Plan and Cost Estimate for the Skelly Unit #402 in Eddy County, New Mexico. Our full service capability, coupled with our experience, provides us with the tools and people required to effectively and economically control your wellbore.

Please review this information. If you have any changes or questions, please call me at (915) 580-0014. We are looking forward to working with you on this project.

Sincerely,

-4

Rick Eaton

х. У

•

.

.

VERTICAL SECTION PLANE: N 90.00 W	0.00° • 1359 XD XD YD YNH S'HLD 1 407/:05 7. 1.00° • 1459 XD XD YD YNH S'HLD 1 407/:05 7. 1.00° • 1450 XD 1.00° • 1500 XD 1.00° • 1450 XD	VERTICAL VIEW SCALE 200 fl. / DIVISION TVD. REF: K3 VERTICAL SECTION REF: WEILFEAD	THE WISER OIL COMPANY SKELLY UNIT #402 SEC. 28, T17S, R31E EDDY COUNTY, NEW MEXICO DIRECTIONAL PROPOSAL
		HORIZONTAL VIEW SCALE 20 ft / DIVISION SURVEY REF: WELLHEAD	CO DRILLING SYSTEMS

HALLIBURTON DRILLING SYSTEMS

Page 1

Proposal Report

Date: 7/24/97 Time: 4:38 pm Wellpath ID: DIRECTIONAL PROPOSAL Last Revision: 7/24/97

Calculated using the Minimum Curvature Method Computed using WIN-CADDS REV2.2.2 Vertical Section Plane: N 90.00 W

Survey Reference: WELLHEAD Offset, Reference To WellHead: (ft): 0.00 N 0.00 E 0.00 TVD Vertical Section Reference: WELLHEAD Closure Reference: WELLHEAD TVD Reference: KB

THE WISER OIL COMPANY SKELLY UNIT #402 SEC. 28, T17S, R31E EDDY COUNTY, NEW MEXICO DIRECTIONAL PROPOSAL

Neasured Depth	inci	Drift Dir.	Course Length	TVD	T O Rectangula	TAL	DLS	Vertical Section
(ft)	(deg.)	(deg.)	(ft)	(ft)	(ft)	(ft)	(dg/100ft)	(ft)
KOP / STA	RT OF B	UILD @ 1.50) deg/100 ft					
1350.00	0.00	N 0.00 E	0.60	1350.00	0.00 N	0.00 E	0.00	0.00
1450.00	1.50	N 90.00 W	100.00	1449.99	0.00 S	1.31W	1.50	1.31
1550.00	3.00	N 90.00 W	100.00	1549.91	0.00 S	5.23W	1.50	5.23
1650.00	4.50	N 90.00 W	100.00	1649.69	0.00 S	11.77W	1.50	11.77
1750_00	6.00	N 90.60 W	100.00	1749.27	0.00 S	20.92W	1.50	20.92
1850.00	7.50	N 90.00 W	100.00	1848.57	0.00 S	32.68W	1.60	32.68
1950.00	9.00	N 90.00 W	100.00	1947.54	0.00 S	47.03W	1.50	47.03
2050.00	10.50	N 90.00 W	100.00	2046.09	0.00 S	63.96W	1.50	63,96
END OF BL	JILD							
2087.49	11.06	N 90.00 W	37,49	2082.92	0.00 S	70.97W	1.50	70.97
START OF	CURVE	@ 1.00 deg/	100 ft					
2309.32	11.06	N 90.00 W	221.83	2300.63	0.00 S	113.54W	0.00	113.54
2409.32	10,06	N 90.00 W	100.00	2398.93	0.00 S	131.87W	1.00	131.87
2509.32	9.06	N 90.00 W	100.00	2497.54	0.00 S	148.48W	1.00	148.48
2609.32	8.06	N 90.00 W	100.00	2596.42	0.00 S	163.37W	1.00	163.37
2709.32	7.06	N 90.00 W	100.00	2695.55	0.00 S	176.53W	1.00	176.53
2809.32	6.06	N 90.00 W	100.00	2794.90	0.00 S	187.95W	1.00	187.96
2909.32	5.06	N 90.00 W	100.00	2894.42	0.00 \$	197.65W	1.60	197.65
3009.32	4,05	N 90.00 W	100.00	2994.11	0.00 S	205.60W	1.00	205.60
3109.32	3.06	N 90.00 W	100.00	3093.91	0.00 S	211.82W	1.00	211.82
3209.32	2.06	N 90.00 W	100.00	3193.81	0.00 S	216.29W	1.00	216.29
3309.32	1.06	N 90.00 W	100.00	3293.77	0.00 S	219.02W	1.00	219.02
3409.32	0.06	N 90.00 W	100.00	3393.77	0.00 \$	220.00W	1.00	220.00

HALLIBURTON DRILLING SYSTEMS

Page 2 Date: 7/24/97

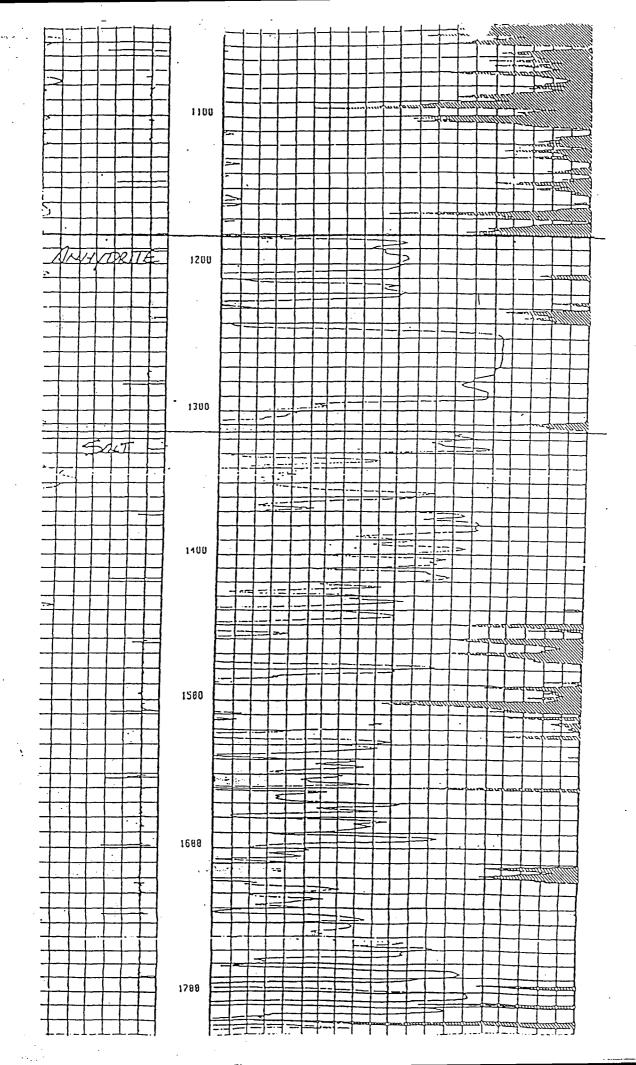
;# 6/ 6

Proposal Report Wellpath ID: DIRECTIONAL PROPOSAL

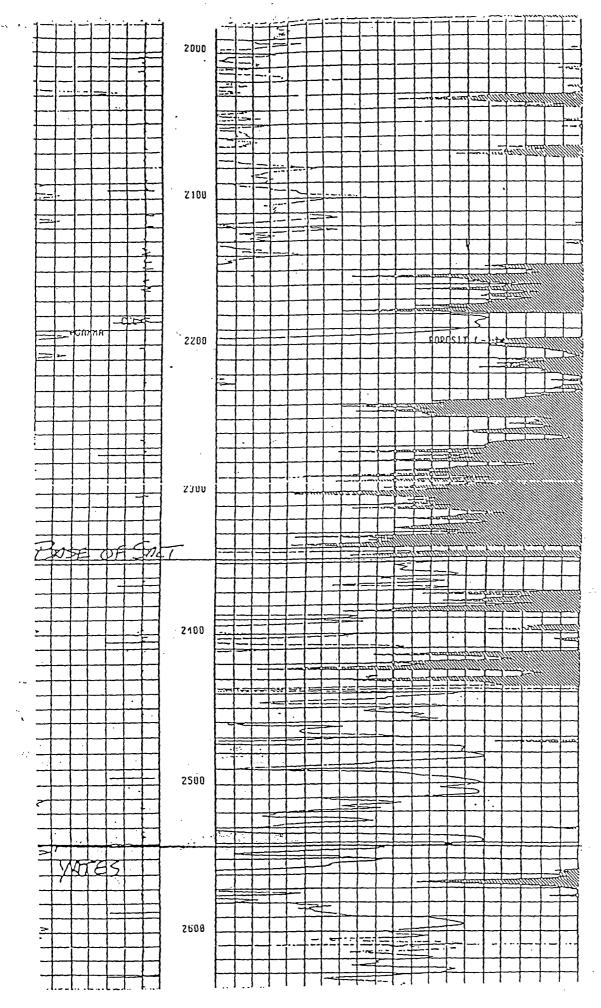
				-			· · · ·	· · ·
Measured Depth	Incl	Drift Dir.	Course Length	TVD	T O Rectangula	TAL rOffsets	DLS	Vertical Section
(ft)	(deg.)	(deg.)	(ft)	(ft)	(作)	(ft)	(dg/100ft)	(18)
TOP OF TA	RGET							
3415.56	0.00	N 0.00 E	6.23	3400.00	0.00 S	220.00W	1.00	220.00
BOTTOM (F TARG	ET						
3815.56	0.00	N 0.00 E	400.00	3600.00	0.00 S	220.00W	0.00	220.00
BOTTOM H	IOLE LO	CATION						
3990.56	0.00	N 0.00 E	175.00	3975.00	0.00 S	220.00W	0.00	220.00

Exh.b. True-Brink transfer TYPE LOG FOR CMU FORMANON TOPS SYDWIN

GAMMA COLLAR GAMMA COLLAR DSN DSN CONPANT WISER CIL COMPANY IVC. CONPANY WISER CIL COMPANY IVC. COUNTY LEA CONVEY LEA COUNTY LEA	TYPE LOG.							
COMPANY WISER CIL COMPANY IVC. WILL COMPANY WISER CIL COMPANY IVC. WILL CHUN WISER SIATE N.R. WILL COUNTY LEA SIATE N.R. WILL WILL LOCATIGN : SIATE N.R. WILL LOCATIGN : WILL SIATE N.R. WILL LOCATIGN : WILL SIATE N.R. WILL LITTER : WILL SIATE SIATE WILL SIATE LITTER : SIATE SIATE WILL SIATE SIATE SIATE SIATE WILL SIATE SIATE SIATE SIATE WILL SIATE SIATE SIATE SIATE SIATE SIATE SIATE SIATE SIATE		N :				GAMMA	j COL	LAR
A I I I/ICLL Chu #153 A I/ICLL Chu #153 I/ICLL Chu #153 A IFIELD TALJANAR SRATBURS SAX ANDRES A PI NO. 32-025-32327 I/IC-ER SCALLES A A A A A A A A A A A A A A A A A A A A A A A A		HALLIBURTON				: C	DSN	
A I I I/ICLL Chu #153 A I/ICLL Chu #153 I/ICLL Chu #153 A IFIELD TALJANAR SRATBURS SAX ANDRES A PI NO. 32-025-32327 I/IC-ER SCALLES A A A A A A A A A A A A A A A A A A A A A A A A			••					l
AC DOLL CAU #153 AC FIELD TALJPNAR SRATBURS SAM ANDRES AC FIELD TALJPNAR SRATBURS SAM ANDRES AC API NO. 32-025-32327 ICI-ER SCALLES ID IDCATION : IDCATION : IDCATION : ID IDCATION : IDCATION : IDCATION : <t< td=""><td></td><td colspan="7">ST COMPANY WISER CIL COMPANY INC.</td></t<>		ST COMPANY WISER CIL COMPANY INC.						
Image: Struct A.A. Image: Struct A.A. Image: Struct	1 AR							
Image: Struct A.A. Image: Struct A.A. Image: Struct	VdXO		TIELO AA	LJANAR SRA	rauns	54%	AKDRES	
A A		5	COUNTY LE			STATE	N.T.	
A A	6 5	2 2 F	SE 54 194	-225-32327			12:	
A A		121					-	
A A		25		Le.FSL A	157. 72	£	:25:	_ > [37]
A A	= -		:	UNIT LETTER	1	•		
PERAMENT DATUM GL ELEV. (:3?* ELEV.::2.9_(:5* LOG. MEASURED FROM KB :2.0 FT. ADVE PERS. DATES D.T DATE & TIME LOGGED ! 12/08/95 ? DE:00/172E OF FLUID 'M MCLE4:12' DATE & TIME LOGGED ! 12/08/95 ? DE:00/172E OF FLUID 'M MCLE4:12' DATE & TIME LOGGED ! 12/08/95 ? DE:00/172E OF FLUID 'M MCLE4:12' DATE & TIME LOGGED ! 12/08/95 ? DE:00/172E OF FLUID 'M MCLE4:12' DATE & TIME LOGGER ! 4850 'PLUID 'M MCLE4:12' DEPIM - ORILLER ! 4850 'PLUID 'FUID DEPIM - LOGGER ! 4788 'CEMENT TOP EST/LOGGED \KA DEPIM - LOGGER ! 4788 'CEMENT TOP EST/LOGGED \KA DATE CONCECT INTERVAL SURF !RECORDED OF \KA TOAX RECORDED IATERVAL SURF !RECORDED OF \KA CASEMOND THERVAL SURF STR!MG 'P200.STR!MG ! L'SE? DATE/TIME CEMENTED 'A' 'A' 'A' 'A' DATE/TIME CEMENTED 'A' 'A' 'A' 'A' CASENT STR 'A' 'A' 'A'				·			:	
PERAMENT DATUM GL ELEV. (:3?* ELEV.::2.9_(:5* LOG. MEASURED FROM KB :2.0 FT. ADVE PERS. DATES D.T DATE & TIME LOGGED ! 12/08/95 ? DE:00/172E OF FLUID 'M MCLE4:12' DATE & TIME LOGGED ! 12/08/95 ? DE:00/172E OF FLUID 'M MCLE4:12' DATE & TIME LOGGED ! 12/08/95 ? DE:00/172E OF FLUID 'M MCLE4:12' DATE & TIME LOGGED ! 12/08/95 ? DE:00/172E OF FLUID 'M MCLE4:12' DATE & TIME LOGGER ! 4850 'PLUID 'M MCLE4:12' DEPIM - ORILLER ! 4850 'PLUID 'FUID DEPIM - LOGGER ! 4788 'CEMENT TOP EST/LOGGED \KA DEPIM - LOGGER ! 4788 'CEMENT TOP EST/LOGGED \KA DATE CONCECT INTERVAL SURF !RECORDED OF \KA TOAX RECORDED IATERVAL SURF !RECORDED OF \KA CASEMOND THERVAL SURF STR!MG 'P200.STR!MG ! L'SE? DATE/TIME CEMENTED 'A' 'A' 'A' 'A' DATE/TIME CEMENTED 'A' 'A' 'A' 'A' CASENT STR 'A' 'A' 'A'	~ ~	김희	•		-	· •		•
LOC ALASURED FROM K3 12.0 FT. ADVE PERS. DATES D.T DATE 2 TIAE LOGGED ! 122/08/95 2 DE:COTTYPE OF FLUD !W MELE ATES DATE 2 TIAE LOGGED ! 122/08/95 2 DE:COTTYPE OF FLUD !W MELE ATES DATE 2 TIAE LOGGED ! 122/08/95 2 DE:COTTYPE OF FLUD !W MELE ATES DEPTM - ORILLER I 4850	리보		SEC. 18	T¥P. ;	7-5	ast. 33-	-6	
DATE INC. ALAS FREY K3 I C. (17) DATE IIAC LOSED IIZ/08/95 2 DE:C0/172E OF F_UID W MCLE_AIES DATE DIKSIY SFLUID W MCLE_AIES DIK DIK DEPIM - ORILLER I 4850 FLUID LEVEL FUUD FUUD DEPIM - DOCCER I 4788 CEAENT TOP ESIZES IN 2614 1-DIESE DEPIM - LOCCER I 4788 CEAENT TOP ESIZES IN 2614 1-DIESE DEPIM - LOCCER I 4788 CEAENT TOP ESIZES IN 2614 1-DIESE DEPIM - LOCCER I 4788 CEAENT TOP ESIZES IN 2614 1-DIESE TOP LOCCED INTERVAL SURF NRECORDED BY HILL TAX RECORDED TEAP. NA NITHESSED BY HALL DATE/TIAE CEAENTED INTRESSED BY HALL INTRESSED BY HALL DATE/TIAE CEAENTED INTRESSED STREY INTRESSED STREY DATE/TIAE CEAENTED INTRESSED FROM INTRESSED STREY DATE/TIAE CEAENTED INTRESSED FROM INTRESSED FROM CAENTYSOUEEZE INTRESSED FROM INTRESSED FROM IND TYFZ/NUD UCT INTRESSED FROM INTRESSED FROM IND TYFZ/NUD UCT INTRESSED FROM INTRESSED FROM								
DATE 2 TIME LOSSED ! 12/08/95 2 DE:C0/TYPE OF F_UID !W MELE_ATED RUM NO. DNE. DEXSITY DF F_UID !W MELE_ATED DEPIM - ORILLER 1 4850 FLUID LEVEL 'FULD NA DEPIM - ORILLER 1 4850 FLUID LEVEL 'FULD NA DEPIM - ORILLER 1 4850 FLUID LEVEL 'FULD NA DEPIM - ORILLER 1 4850 FLUID LEVEL 'FULD NA DEPIM - LOSGED WIERWAL 4287 EDVIPMENT & LOCATION - 2614 - 2515 TOP LOSGED INTERVAL SURF RECORDED BY HILL MAX RECORDED TEAP. NA W:IMEESED BY HALL MAX RECORDED TEAP. NA W:IMEESED BY HALL DATE/TIME DATA SURF. STRING * 1AL.STRING * PROD.STRING # 1:NEP DATE/TIME CEAENTED				:2.3 -1.	ABOVE PE	RA. DATU		
DEPIN - ORILLER 14850 SLUID LEVEL FUL DEPIN - LOCGER 14788 CEMENT TOP ESTADDED NA DIA RECORDED INTERVAL 4287 EDUIPMENT & LOCATION - 2614 - DEEE TOP LOGGED INTERVAL SURF RECORDED BY HLL AAX RECORDED TENP. NA METONESSED BY HLL CEMENTING DATA SURF. STRING PRODUCTION - 2614 - DEEE DATE/TINE CENENTED NA METONESSED BY HLL CEMENTING DATA SURF. STRING PRODUCTION - 2614 - DEEE DATE/TINE CENENTED NA METONESSED BY HLL CEMENTING DATA SURF. STRING PRODUCTION - 2614 - DEEE DATE/TINE CENENTED NA METONESSED BY HLL CEMENTING DATA SURF. STRING PRODUCTION - 2614 - DEEE CASING AND TUE NA MESS NA NA CENENT VOLUME Image: String and Tueling RECORD Image: String and Tueling RECORD Image: String and Tueling RECORD NON BORCHOLE RECORD CASING AND TUEING RECORD Image: String and Tueling RECORD Image: String and Tueling RECORD NA BI	JATE E			195 2 381	3411,60	OF F_010	IN HOLE	
DEPIN - LOCCER 14788 CEMENT TOP ESTALDOUD VA DIA LOCCEC INTERVAL 4287 EDUIPMENT & LOCATION - 2614 :-DIEST TOP LOCCED INTERVAL 4287 EDUIPMENT & LOCATION - 2614 :-DIEST TOP LOCCED INTERVAL SURF IRECORDED BY FILL TAX RECORDED TEAP. NA WITHESSED BY FILL TAX RECORDED TEAP. INTERVAL SUPF. TAX RECORDER INTERVAL SUPF. TAX RECORD TEAP. INTERVAL INTERVAL TAX RECORD TEAP.	30H No.			•				
BIA LOGGEC INTERVAL 4287 EDUIPAENT & LOCATIDA - 2614 :-DEEE TOP LOGGED INTERVAL SURF IRECORDED BY FIL TAX RECORDED TEAP. KA L'INESSID BY FIL CAX RECORDED TEAP. KA L'INESSID BY FIL CAX RECORDED TEAP. KA L'INESSID BY FIL CAX RECORDED TEAP. KA L'INESSID BY FIL CARDING DATA SURF. STRING PROVING I INE CARATYSDUEZE INTS INTS PROVING I INTS CARACTOR VOLUNG INFS INFS INFS INFS CARANT TYPE/NUCATION INFS INFS INFS INFS RUN BOREHOLE RECORD CASING AND TUEING RECORD INFS INFS RUN BOREHOLE RECORD CASING AND TUEING RECORD INFS INFS INFS RUN BOREHOLE RECORD CASING AND TUEING RECORD INFS INFS INFS INFS INO TRECORD CASING AND TUEING RECORD INFS INFS INFS INFS INO TRECORD INFS INFS <								
TOP LOGGED INTERVAL SURF IRECORDED BY HILL TAX RECORDED TEAP. IXA INTINESSED BY MRR. C. NE. TA CERENTING DATA SURF. STRING INTINESSED BY MRR. C. NE. TA CERENTING DATA SURF. STRING INTINESSED BY MRR. C. NE. TA CATE/TINE CERENTED INTINESSED BY MRR. C. NE. TA CATE/TINE CERENTED INTINESSED BY MRR. C. NE. TA CATE/TINE CERENTED INTINESSED INTINESSED CATE/TINE CERENTIED INTINESSED INTINESSED CATE/TINE CERENTIED INTINESSED INTINESSED CATE/TINE CERENTIED INTINESSED INTINESSED CATE/TINE INTINESSED INTINESSED <td></td> <td></td> <td></td> <td><u> </u></td> <td></td> <td></td> <td></td> <td></td>				<u> </u>				
CLFENTING DATA SURF. STRING INT.STRING PROSTRING PROSTRING INT.STRING PROSTRING INT.STRING PROSTRING PROSTRING<								1014 1-2112
CLFENTING DATA SURF. STRING INT.STRING PROSTRING PROSTRING INT.STRING PROSTRING INT.STRING PROSTRING PROSTRING<					LL:THE	ESCO BY		A5-"34
PRINART/SDUEEZE Image: Image					NT.STRIN	c : 2200.	STRING 1	
CONPRESSIVE STR. Image: Stress of the stre				•1	1		· · · · ·	
XPECIED 0: Image: Solution of the solution of th				I				·
EERENT 1YPE/WEIGNT								
ELAENT IYPE/WEIGNT Image: State of the s					1 663			
DURAULATION CASING AND TURING RECCOD RUN BOREHOLE RECORD CASING AND TURING RECCOD Ng. BIT SZ. FROM TO SIZE WCT. FROM. TO ONE 8.625 KA 3 1 1230 TO <			p		•			
RUN BOREHOLE RECORD CASING AND TURING RECORD SOURT TO SOURT	NUD ITPE	KUD HCT.	1					
No. BIT SZ. FROM TO SIZE WCT. FROM. SIZE SIZE WCT. FROM. SIZE SIZE SIZE SIZE SIZE SIZE SIZE WCT. FROM. SIZE SIZE SIZE SIZE SIZE SIZE SIZE SIZE SIZE<	FORMULATION							
No. BIT SZ. FROM TO SIZE WCT. FROM. SIZE SIZE WCT. FROM. SIZE SIZE SIZE SIZE SIZE SIZE SIZE WCT. FROM. SIZE SIZE SIZE SIZE SIZE SIZE SIZE SIZE SIZE<								
ONE 8.625 KA 3 1 1200 INO 7.675 -1280 4850 5.5 17.0 0 4850 5								·
Ιμο 7.675 -1280 4859 5.5 17.0 0 <850 5 5 5 5 5 5 5 5 5 5 5 5 17.0 0 <850 5 5 5 17.0 0 <850 5 5 5 17.0 0 <850 5 5 5 17.0 0 <850 5 5 5 17.0 0 <850 5 5 5 17.0 0 <850 5 5 5 17.0 0 <850 5 5 5 17.0 0 <850 5 5 5 17.0 0 <850 5 5 5 17.0 0 <850 5 5 5 17.0 0 <850 5 5 17.0 0 <850 5 5 17.0 0 <850 5 5 17.0 0 <850 5 5 10.0		011 52.	FROM	19				
		7 875	.1780	4850				
		1.013	1100.	1030				
							<u> </u>	
			· · ·					
			1	L	1		1	<u> </u>



``



•



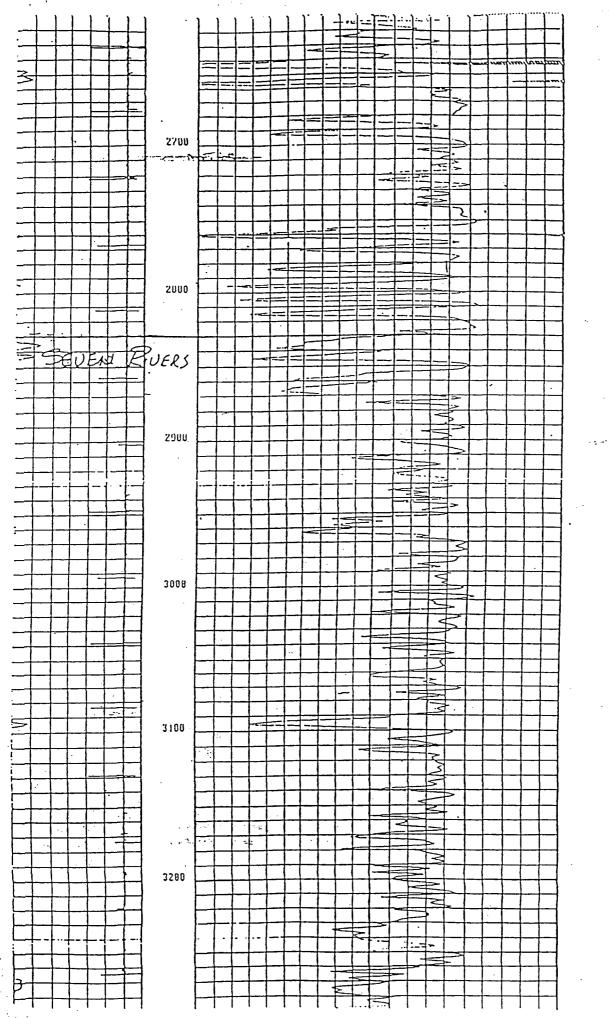
.

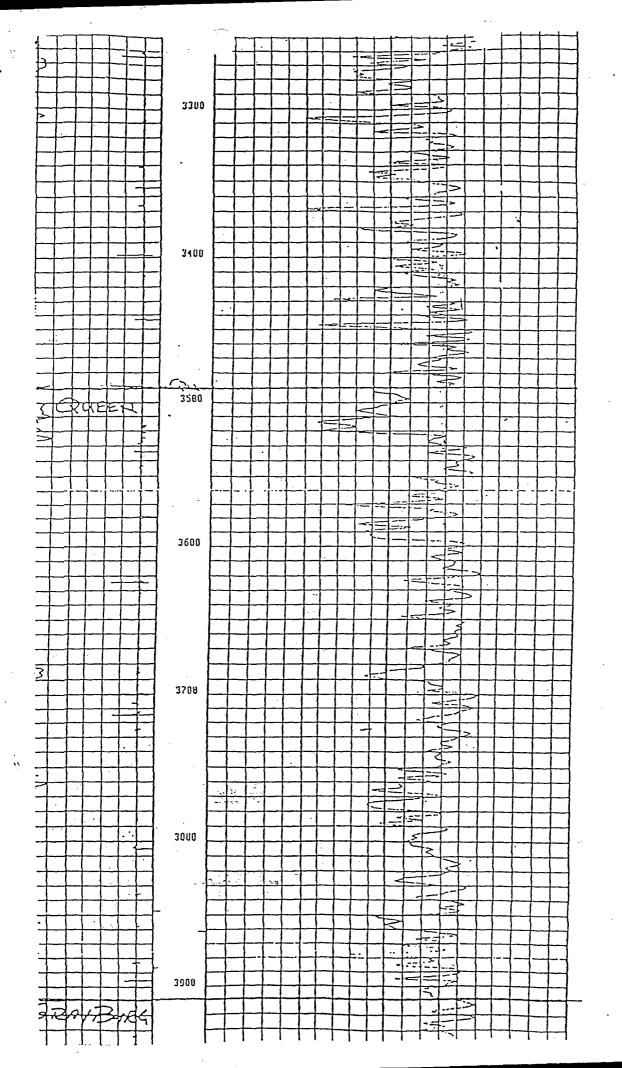
•

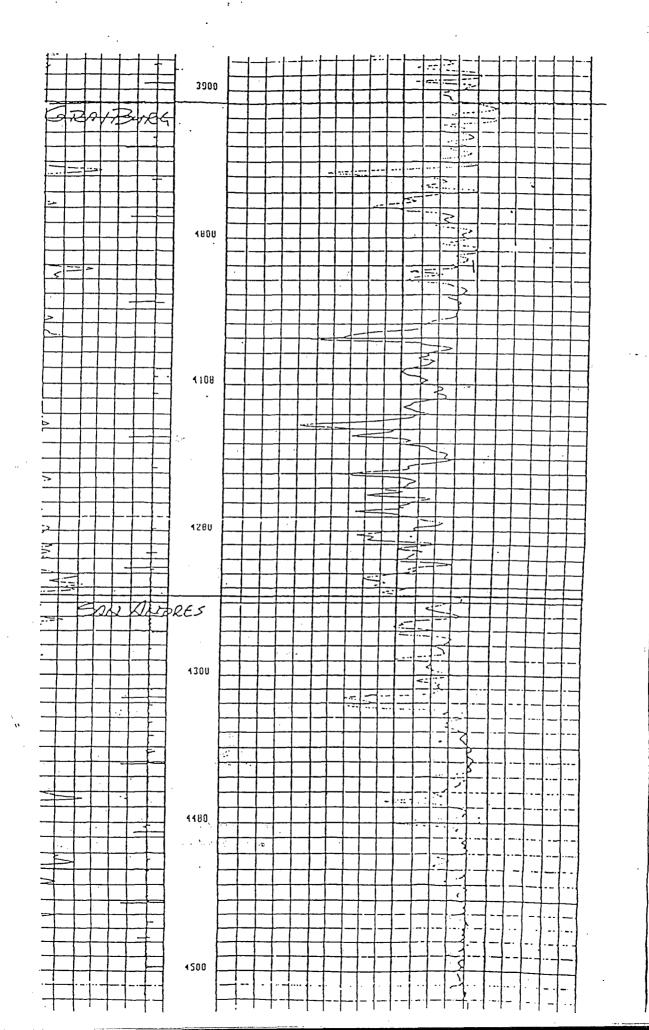
. · ·

· · · · · ·

.







COOPERATIVE UNIT LINE INJECTION WELL AND UNIT LINE INFILL DRILLING AGREEMENT

SKELLY WATERFLOOD UNIT TURNER "B" WATERFLOOD PROJECT

THIS AGREEMENT is entered into by The Wiser Oil Company as Operator of the Skelly Waterflood Unit, hereafter referred to as "Wiser", and Devon Energy Corporation (Nevada), as Operator of the Turner "B" Waterflood Project, hereafter referred to as "Devon".

RECITALS:

Wiser is the Operator of the Skelly Waterflood Unit under the terms of the applicable Unit Agreement and the Unit Operating Agreement for said Unit (the "Unit") and the owner of 100% working interest therein.

Devon is the Operator of the Turner "B" Waterflood Project as approved by State of New Mexico Oil Conservation Division Order No. R-3185 (the "Project") and the owner of 100% working interest therein

The Unit Area of the Skelly Waterflood Unit includes, among other lands, the W/2 W/2 of Section 21, the W/2 NW/4 and NW/4 SW/4 of Section 28, all in Township 17 South, Range 31 East, Eddy County, New Mexico, and the Project Area for the Turner "B" Waterflood Project, includes, among other lands, the E/2 E/2 of Section 20, the NE/4 SE/4 and E/2 NE/4 of Section 29, all in Township 17 South, Range 31 East, Eddy County, New Mexico.

Wiser and Devon desire to enter into an agreement to provide for the continued operation of existing injection wells, the reactivation of existing shut-in injection wells, and the conversion of additional wells to injection as provided in Article 1, along the common boundary of the above described lands for the injection of water into one or more of the Seven Rivers, Queen, Grayburg, and San Andres formations underlying said lands in order to enhance the recovery of hydrocarbons from their respective Unit/Project. Wiser and Devon also desire to enter into an agreement to drill up to six infill producing wells on 20 acre spacing units along the common boundary line of the Skelly Waterflood Unit and the Turner "B" Waterflood Project in accordance with Article 7 below.

NOW, THEREFORE, in consideration of the mutual benefits to be derived from the covenants and obligations herein contained, Wiser and Devon agree as follows:

ARTICLE 1

INJECTION WELLS

1.1 Wiser has made application before the New Mexico Oil Conservation Division to convert to injection or reactivate existing shut-in injection wells as follows:

Skelly Unit #62 Located in NW/4 NW/4 of Section 21-T17S-R31E Skelly Unit #63 Located in SW/4 NW/4 of Section 21-T17S-R31E Skelly Unit #64 Located in NW/4 SW/4 of Section 21-T17S-R31E Skelly Unit #74 Located in SW/4 SW/4 of Section 21-T17S-R31E Skelly Unit #74 Located in NW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #72 Located in NW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #72 Located in SW/4 NW/4 of Section 28-T17N-R31E Skelly Unit 100 Located in NW/4 SW/4 of Section 28-T17N-R31E

Within one hundred twenty (120) days of receipt of approval by the New Mexico Oil Conservation Division, Wiser shall convert, reactivate and equip the above wells as necessary, for the injection of water into one or more of the Seven Rivers, Queen, Grayburg, and San Andres formations. These wells shall be equipped, maintained and operated under this agreement, and the covenants of Wiser under this agreement shall be performed at the expense of Wiser as an item of unit expense under the Unit Operating Agreement for the Skelly Waterflood Unit.

1.2 Devon, within thirty (30) days after execution of this agreement, shall make application before the New Mexico Oil Conservation Division to convert to injection or reactivate existing shut-in injection wells as follows:

Turner "B" #11 Located in SE/4 NE/4 of Section 20-T17S-R31E Turner "B" #9 Located in NE/4 NE/4 of Section 20-T17S-R31E Turner "B" #51 Located in NE/4 SE/4 of Section 20-T17S-R31E Turner "B" #59 Located in NE/4 NE/4 of Section 29-T17S-R31E Turner "B" #62 Located in NE/4 SE/4 of Section 29-T17S-R31E

Within one hundred twenty (120) days of receipt of approval by the New Mexico Oil Conservation Division, Devon shall convert, reactivate, and equip the above wells as necessary, for the injection of water into one or more of the Seven Rivers, Queen, Grayburg, and San Andres formations. These wells shall be equipped, maintained and operated under this agreement, and the covenants of Devon under this agreement shall be performed at the sole expense and risk of Devon.

1.2.1 Wiser and Devon recognize that the following Devon operated wells have previously been converted to injection and are currently injecting water into one or more of the Seven Rivers, Queen, Grayburg and San Andres formations:

Turner "B" #46 Located in SE/4 SE/4 of Section 20-T17S-R31E Turner "B" #55 Located in SE/4 NF/4 of Section 29-T17S-R31E

The above wells shall continue to be operated in accordance with the terms of this agreement and more specifically in accordance with Article 2.2 hereof.

1.3 <u>Well Log</u>: Upon execution of this agreement and upon request, each party shall provide the other party with a copy of a porosity log on each of the wells contemplated by this agreement, indicating perforation depth. Each party, upon request, shall also provide the other party with details of workover operations on each of the wells, including stimulation and squeezing operations.

1.4 <u>Replacement and Substitute Wells</u>: It is recognized by the parties that the incremental recovery of hydrocarbons reasonably expected from each Unit/Project Area as a result of the injection operations contemplated by this agreement may not justify the drilling of a replacement well in the event a party is unable to continue operations of existing injection wells or is unable to convert its well to an injection well or to obtain governmental authorization to inject fluids into the well. If, as a result of a lack of wellbore integrity or other condition in the hole or formations penetrated, either party is unable after exercising reasonable diligence as would a prudent operator to continue operations of existing injection wells or to convert the wells described in Articles 1.1, 1.2 and 1.2.1 herein to injection wells or to obtain governmental authorization to inject fluids into the Seven Rivers, Queen, Grayburg and San Andres formations, said party shall, within thirty (30) days, notify the other party hereto in writing of the condition of such well and shall have the option but not the obligation to propose either to substitute an existing well therefor, or to drill a replacement well at a location within three hundred (300) feet of the well to be replaced.

If the notifying party has elected to drill a replacement well, it shall, within a reasonable time after giving the above described notice, begin operations for the drilling of the replacement well. If it has chosen to propose a substitute well, the remaining party hereto may either accept or reject the proposed substitute well. If the notifying party proposes a substitute well that is acceptable to the remaining party hereto, the notifying party shall drill and equip said well within one hundred twenty (120) days after receiving the remaining party's written acceptance thereof. If the remaining party hereto rejects the proposed substitute well, such remaining party shall have the option to cease operating any adjacent injection well covered by this agreement.

ARTICLE 2

OPERATION

2.1 <u>Water Supply</u>: Each party either has constructed or shall construct and maintain facilities necessary for delivery of water to its injection wells and shall furnish water suitable for injection therein. Each party, upon request, shall provide the other party with a water analysis of its injection water.

2.2 Except as otherwise provided in Article 1.4 herein ("Replacement and Injection: Substitute Wells"), water injection into each of the proposed conversion injection wells and reactivated injection wells shall commence within sixty (60) days after receipt of approval by the New Mexico Oil Conservation Division. Injection of water into each injection well covered by this agreement, shall be at rates and pressures mutually agreed upon, and below the fracturing pressure of the formation as determined by periodic step-rate injectivity tests. Prior to running a step-rate test, the operating pressure on the well shall be set at a level lower than the lowest fracturing pressures measured by step-rate tests in nearby injection wells completed in the formation. If the rates and pressures cannot be mutually agreed upon, the rate shall be at least 300 barrels of water a day, provided the rate does not result in a bottomhole pressure which is greater than the formation fracturing pressure. Each party, upon request, shall provide the other party details of the results of each step-rate test and any fall-off tests conducted on its wells. Each month, each party shall provide the other party with a statement showing the average daily injection rate and the average daily injection pressure, for the previous month, along with the cumulative injection volumes, for all wells within 700 feet of the common unit boundary.

2.3 <u>Injection Profile</u>: Each party shall run annual radioactive water tracer surveys on its wells. Each party shall, upon request, provide a copy of its injection profile logs to the other party hereto.

2.4 <u>Metering</u>: Each party shall be responsible, at its sole cost and expense, for installing and maintaining in good repair, appropriate pressure gauges and water meters for each of the injection wells covered by this agreement.

ARTICLE 3

INTERESTS AND OBLIGATIONS OF PARTIES

3.1 <u>Interests of Parties</u>: Nothing in this agreement shall be deemed to be an assignment or a cross-assignment of interests in the respective Unit/Project Areas. This agreement is entered into for the sole purpose of providing for the operation of injection and infill producing wells on the common boundary of the Unit/Project Areas to enhance the recovery of hydrocarbons from each Unit/Project Area so that the party who operates the Unit/Project Area, along with the other owners of interests in production from the Unit/Project Area, may benefit by an increase in ultimate recovery of hydrocarbons from the Unit/Project Area.

3.2 <u>Obligations of Parties</u>: The obligations and liabilities of the parties shall be several, not joint or collective. Each party shall be responsible only for its obligations as set out in this agreement. It is not the intention of the parties to create, nor shall this agreement be construed to create, a mining or other partnership or association, or to render the parties liable as partners.

ARTICLE 4

FORCE MAJEURE

If either party is rendered unable, wholly or in part, by force majeure to carry out its obligations under this agreement, that party shall give to the other party prompt notice of the force majeure with reasonably full particulars concerning it; thereupon, the obligations of the party giving notice, so far as they are affected by the force majeure, shall be suspended during, but no longer than the continuance of, the force majeure. The affected party shall use all reasonable diligence to remove the force majeure situation as quickly as practicable. The requirement that any force majoure shall be remedied with all reasonable dispatch shall not require the settlement of strikes, lockouts, or other labor difficulty by the party involved, contrary to its wishes, how all such difficulties shall be handled shall be entirely within the discretion of the party concerned.

The term "force majeure", as here employed shall mean an act of God, strike, lockout or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightning, fire, storm, flood, explosion, governmental action, governmental delay, restraint or inaction, unavailability of equipment, failure of water supply, and any other cause, whether of the kind specifically enumerated above or otherwise, which is not reasonably within the control of the party claiming suspension.

ARTICLE 5

NOTICES

All notices and other communications authorized or required between the parties under this agreement shall be deemed to have been given when such communications in writing shall have been received by fax or United States mail, by the party to whom the notice is given at the following address:

Wiser:

Devon:

The Wiser Oil Company 8115 Preston Road, Suite 400 Dallas, TX 75225 Attn: Matt Eagleston Project Manager Devon Energy Corporation (Nevada) 20 North Broadway, Suite 1500 Oklahoma City, OK 73102 Attn: Steve Cromwell Land Manager

Each party shall have the right to change its address at any time, and from time to time, by giving written notice thereof to the other party.

ARTICLE 6

EFFECTIVE DATE AND TERM OF AGREEMENT

6.1 Effective Date: The effective date of this agreement shall be January 1, 1997.

6.2 <u>Term of Agreement</u>: This agreement shall be in effect for a period of five (5) years after the effective date hereof and so long thereafter as the Skelly Waterflood Unit, and the Turner "B" Waterflood Project are in effect, unless earlier terminated as hereafter set forth.

This agreement may be terminated at any time after the expiration of such five (5) year term by unanimous agreement of the parties hereto. If the parties are unable to agree, the term of this agreement shall not extend beyond ten (10) years from the cessation of operations attributable to the wells covered in Article 1 and Article 7 hereof.

ARTICLE 7

In order to further enhance the ultimate recovery of hydrocarbons from both the Skelly Waterflood Unit and the Turner "B" Waterflood Project, Wiser and Devon each agree to drill and operate three infill producing wells along the common boundary of the Unit/Project at the approximate locations described on Exhibit "A" attached hereto. Such wells shall be drilled and completed within one hundred eighty (180) days from the execution of this agreement. Wiser and Devon recognize that in order to be able to drill these infill wells at the proposed locations, each company will be required to obtain unorthodox location approval from the New Mexico Oil Conservation Division. Accordingly, Wiser and Devon hereby covenant to execute any waivers necessary for the remaining party bereto to administratively obtain such unorthodox locations in accordance with applicable New Mexico Oil Conservation Division rules.

In order to share in the risks and rewards of drilling the proposed infill wells, Wiser and Devon further agree that an operating agreement between the parties, designating Devon as operator of those infill wells located on the Turner "B" Lease, and further designating Wiser as operator of those infill wells located on the Skelly Unit, which shall be executed simultaneously with this agreement, is attached hereto as Exhibit "B" and made a part hereof. Said operating agreement shall govern the drilling, completion and all other operations associated with such infill wells. Notwithstanding the current working interest ownership of the Turner "B" Waterflood Project and the Skelly Waterflood Unit as recited in paragraphs 1 and 2 above, the working interest of the parties under said operating agreement shall be:

The Wiser Oil Company	50.00%
Devon Energy Corporation (Nevada)	50.00%

The operating agreement and exhibits thereto shall become effective as of the effective date of this agreement and shall govern any operations not expressly covered by this agreement. In the event of a conflict between the terms of the Operating Agreement attached hereto as Exhibit "B" and the terms of this agreement, the terms of this agreement shall prevail.

Production attributable to the Devon operated infill wells as set forth on Exhibit "A" shall be commingled into an existing Turner "B" tank battery of Devon's choice. Production attributable to the Wiser operated infill wells as set forth on Exhibit "A" shall be commingled into an existing Skelly Waterflood tank battery of Wiser's choice. Wiser and Devon agree that production from such infill wells shall be allocated based upon monthly well tests. Well testing shall be accomplished utilitizing a test heater treater or test separator. Produced fluid from a well to be tested will be segregated from the field production and diverted to a test vessel where the separation of oil, gas and water will occur. Only one well shall be tested at a time. No other wells shall be allowed to produce into the test vessel when another well is being tested. Oil and water volumes exiting the vessel will be metered or sent to a test tank for direct measurement.

If metering oil volumes, meter accuracy should be at least $\pm 1.0\%$ with a repeatability of at least $\pm 0.05\%$. Oil meters should be calibrated on a quarterly basis with each party having the right, upon thirty (30) days written notice, to witness such oil meter calibrations. Any time the accuracy of a meter is in question either party with reasonable written notification may inspect the other party's oil meter at their own expense.

Gas volumes may be allocated based on the applicable Project or Unit GOR, or gas volumes may be measured using an orifice well tester connected to the gas outlet on the heater treater or test separator.

ARTICLE 8

COMPLIANCE WITH LAWS AND REGULATIONS

8.1 <u>Laws Regulations and Orders</u>: This agreement shall be subject to and operations hereunder shall be conducted in compliance with the conservation laws of the State of New Mexico, the valid rules, regulations and orders of the New Mexico Oil Conservation Division and - all other applicable federal, state and local laws, ordinances, rules, regulations and orders.

8.2 <u>Groverning Law</u>: This agreement and all matters pertaining hereto, including, but not limited to, matters of performance, nonperformance, breach, renvedies, procedures, rights, duties and interpretations or construction, shall be governed and determined by the law of the State of New Mexico.

ARTICLE 9

INDEMNITY

Each party hereto agrees to protect, defend, indemnify and hold harmless the other party from and against any claims, demands, causes of action, losses and/or liabilities of every kind and character arising out of, incident to, or in connection with such other party's water injection operations parameters to the provisions of this agreement excepting, however, any claim, demand, cause of action, loss and/or liability which may result from the gross negligence or willful misconduct of such other party, its agents, officers, or employees. Such indemnity shall include, without limitation, reasonable attorney's fees, court costs and similar expenses. Each party hereby releases the other party from any liability for damages to the releasing party's interest in and to the releasing party's land described herein, arising out of, incident to, or in connection with the operations contemplated by this agreement, provided such operations are conducted in accordance with the terms and conditions of this agreement and such damage is not the result of gross negligence or willful misconduct of such other party.

ARTICLE 10

MISCELLANEOUS

10.1 Entire Agreement: This agreement embodies the entire agreement between the parties relating to the subject matter hereof and shall supersede all other agreements, assurances, conditions, covenants or terms relating hereto, whether written or verbal or antecedent or contemporaneous with the execution thereof. This agreement may be modified or amended only by an instrument in writing signed by both parties.

10.2 Captions: Captions have been inserted for reference purposes only and shall not define or limit the terms of this agreement.

Binding Effect: This agreement shall be binding upon and shall inure to the benefit of the 10.3 parties hereto and to their respective successors, legal representatives and assigns.

WITNESS EXECUTION this 25th day of april 1997.

ATTEST:

By

THE WISER OIL COMPANY B۱ Di la Card

ATTEST

11 SVEVE CRONIVEL

isiami Secretari

DEVON ENERGY CORPORATION (NEVADA) ĻК By: J. M. Lase Vice President

EXHIBIT "A"

Attached to and made a part of that certain Joint Operating Agreement dated January 1, 1997 by and between The Wiser Oil Company and Devon Energy Corporation (Nevada)

OPERATOR:

The Wiser Oil Company

The Wiser Oil Company

The Wiser Oil Company Devon Energy Corporation (Nevada) Devon Energy Corporation (Nevada) Devon Energy Corporation (Nevada)

I. CONTRACT AREA:

II.

Sheily Jerrar Well #258, 10[°] FSL and 10[°] FWL, Section 21-T17S-R31E Skeily Unit Well #271, 1300[°] FNL and 10[°] FWL, Section 28-T17S-R31E Skeily Unit Well #282, 2625[°] FNL and 10[°] FWL, Section 28-T17S-R31E Turner B-134, 1350[°] FNL and 10[°] FEL, Section 20-T17S-R31E Turner B-135, 2625[°] FNL and 10[°] FEL, Section 20-T17S-R31E Turner B-136, 3900[°] FNL and 10[°] FEL, Section 20-T17S-R31E

ADDRESSES FOR NOTICE PURPOSES:

The Wiser Oil Company	Devan Energy Corporation (Nevada)		
8115 Preston Road, Suite 400	20 North Broadway, Suite 1500		
Dallas, TX 75225	Oklaboma City, OK 73102		
Attn: Matt Eagleston	Attn: Steve Cromwell		
Project Manager	Land Manager		

III. PERCENTAGE WORKING INTERESTS OF THE PARTIES;

Parties	Percentage Working Interest in Contract Area
The Wiser Oil Company	50.00%
Devon Energy Corporation (Nevada)	50,00%
Totals	100.00%

IV. DESCRIPTION OF COMMITTED LEASEHOLD:

Each of the Oil, Gas and Mineral Leases, or undivided interests therein, committed to this Agrocment by the parties hereto and listed hereinafter are committed INSOFAR, AND ONLY INSOFAR, as each covers lands and depths within the Contract Area. All recording references are to the County Records of Eddy County, New Mexico.

A. Leases committed by The Wiser Oil Company (100%):

LESSOR.	LENNER	LEASE DATE	LESSOR ROY.	OTHER BURDENS	 ENCES PAGE
USA #LC-029420-B	Shelly UR Company	4/30/38	ail92.10000 gm1250000	0100000 ORBI	

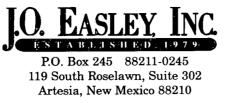
8. Leases committed by Dovon Energy Corporation (Nevada) (100%):

LESSOR	LIBSEE	LEASE DATE	LESSOR ROY.	other Burdyns	RECORDING REFERENCES BOOK PAGE
USA #LC-025395-13	l kanziger Oli & Refining Co.	471/48	oii0210030 gm=1250000	-D-	

97

Telephone (505) 746-1070 Fax (505) 746-1073





August 19, 1997

AUG 2 1 1997

Mr. William Lemay New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

RE: Application for Administrative Approval Unorthodox Location Skelly Unit # 401 Skelly Waterflood Unit Eddy County, New Mexico

Dear Mr. Lemay:

The Wiser Oil Company hereby applies for administrative approval of the above noted well at an unorthodox well location of 1300' FNL & 60' FWL in Section 28-17S-31E, within the Skelly Unit.

We seek this approval to facilitate the effective production of reserves within both the Skelly Waterflood Unit and Turner "B" Waterflood Project. In Article 7 of the attached Unit Line Agreement between Wiser and Devon Energy, each agrees to execute any waivers necessary to administratively obtain such unorthodox locations at the NMOCD. Devon being the only offset Operator, no Affidavit of Mailing was prepared, however, Devon will be provided a copy of this letter and application. If you have any questions, or need additional information, please feel free to gibe me a call at (505) 746-1070. Thank you for your attention to this matter.

Sincerely, J. O. Easley, Inc. Milael R. Burch

Michael R. Burch, CPL

mrb/s Enclosures

cc/

Mr.Tim W. Gumm NMOCD 811 South 1st Street Artesia, NM 88210

Mr. Mike Jones The Wiser Oil Co. P. O. Box 2568 Hobbs, NM 88241 Mr. Matt Eagleston The Wiser Oil Co. 8115 Preston Road Suite 400 Dallas, Texas 75225

Mr. Ken Gray Devon Energy Corp. 20 North Broadway Suite 1500 Oklahoma City, OK 73102-8260

~				. .		
P.	0.	Bog	1980,	Kobbs,	ю	88241-1980

TOICT

DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III 1000 Rio Brazos Rd., Astec, NM 87410 OIL CONSERVATION DIVISION P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Revised February 10, 1994 Submit to Appropriate District Office

EXHIBIT "D"

DISTRICT IV P.O. Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code Pool Name API Number Grayburg Jackson 7-Rivers QN GB SA Property Code 28509 Property Name SKELLY UNIT 401 OGRIDON-7540 **Operator** Name Elevation 022922 THE WISER OIL COMPANY 3770 Surface Location Feet from the North/South line UL or lot No. Section Township Lot ldn Feet from the East/West line Range County 1300 WEST D 28 17 S 31 E NORTH 60 EDDY Bottom Hole Location If Different From Surface UL or lot No. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County **Dedicated** Acres Joint or Infill Consolidation Code Order No. 40 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION **OPERATOR CERTIFICATION** I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature K) Michael R. Burch, CPL Printed Name Agent for The Wiser Oil -60 3763.1 3772.5' Company Title -LOCATION 8-19-97 3763.9' 3769.5 Date SURVEYOR CERTIFICATION 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 supervison, and that the same is true and correct to the best of my belief. Date Surgesed Milling AUGUST 8. 1997 JI P Protessional Surv 1201 Nhm 345 Ŧ Certificate No. JOHN W-676 HIM PROFECTION SEEDSON, 3239 12641

State of New Mexico

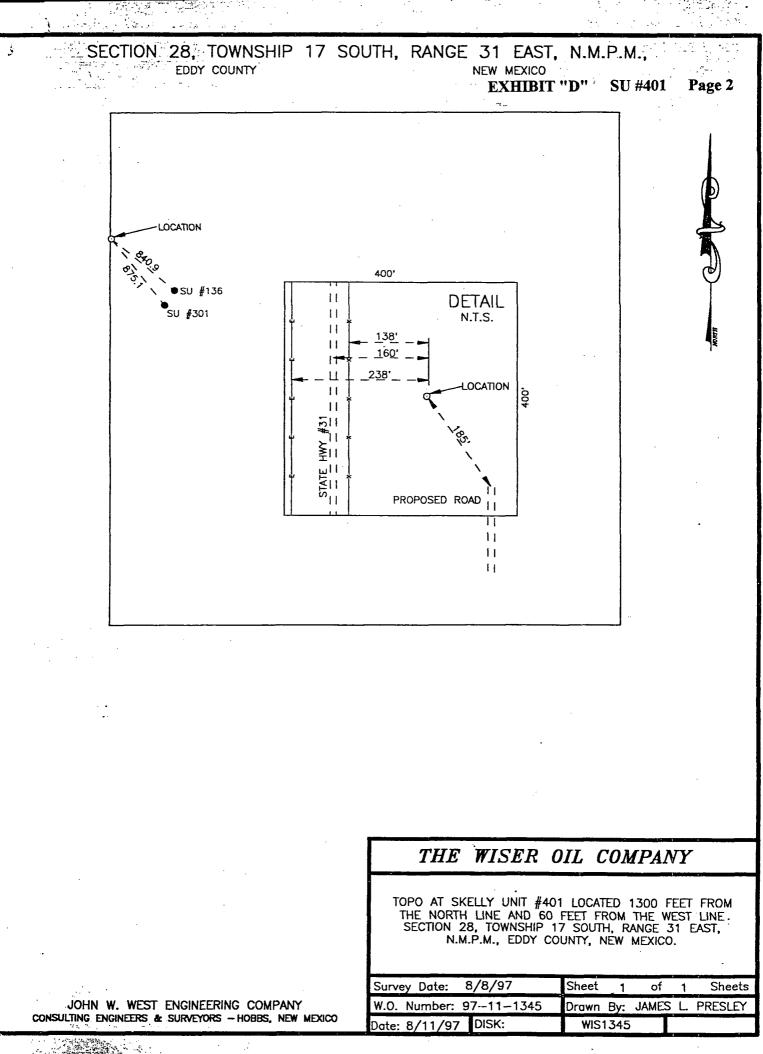
Energy, Minerals and Natural Resources Department

□ AMENDED REPORT

State Lease - 4 Copies

Fee Lease - 3 Copies

Form C-102

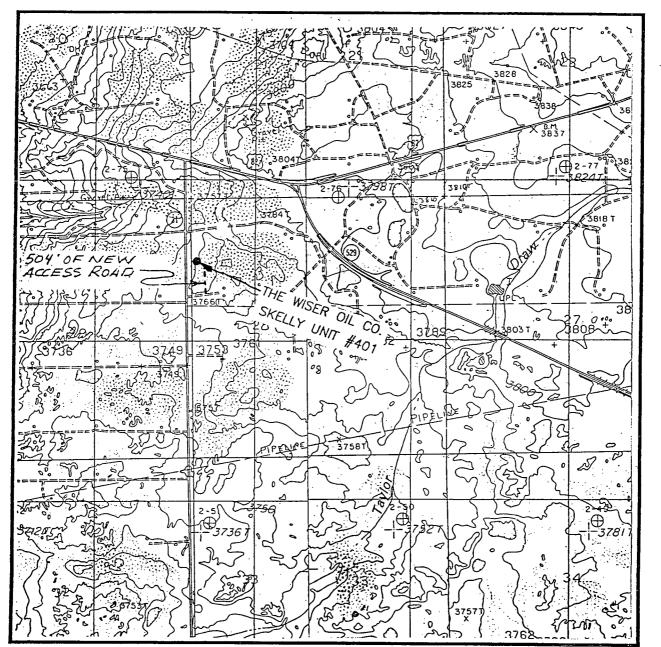


LOCATION VERIFICATION MAP

Paved Highway

Existing Access Road

Proposed Access Road



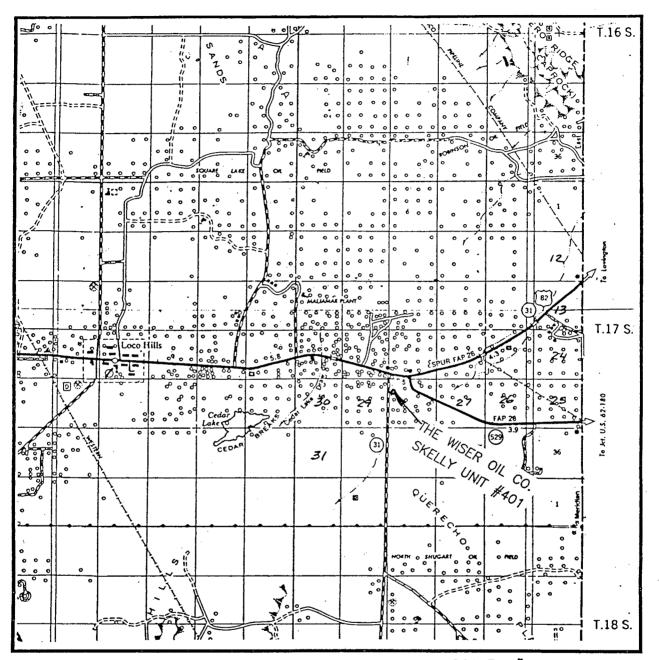
SCALE: 1'' = 2000'

SEC. <u>28</u> TWP. <u>17–S</u> RGE. <u>31–E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>EDDY</u> DESCRIPTION <u>1300' FNL & 60' FWL</u> ELEVATION <u>3770'</u> OPERATOR <u>THE WISER OIL CO.</u> LEASE <u>SKELLY UNIT</u> U.S.G.S. TOPOGRAPHIC MAP LOCO HILLS, & MALJAMAR, N.M. CONTOUR INTERVAL - 10'

JOHN WEST ENGINEERING HOBBS, NEW MEXICO (505) 393-3117

EXHIBIT "E" SU#401 Page 2

VICINITY MAP



SEC. <u>28</u> TWP.<u>17–S</u> RGE.<u>31–E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>EDDY</u> DESCRIPTION<u>1300' FNL & 60' FWL</u> ELEVATION <u>3770'</u> OPERATOR <u>THE WISER OIL CO.</u> LEASE <u>SKELLY UNIT</u> SCALE: 1'' = 2 MILES

JOHN WEST ENGINEERING HOBBS, NEW MEXICO (505) 393-3117

COOPERATIVE UNIT LINE INJECTION WELL AND UNIT LINE INFILL DRILLING AGREEMENT

SKELLY WATERFLOOD UNIT TURNER "B" WATERFLOOD PROJECT

THIS AGREEMENT is entered into by The Wiser Oil Company as Operator of the Skelly Waterflood Unit, hereafter referred to as "Wiser", and Devon Energy Corporation (Nevada), as Operator of the Turner "B" Waterflood Project, hereafter referred to as "Devon".

RECITALS:

1. Wiser is the Operator of the Skelly Waterflood Unit under the terms of the applicable Unit Agreement and the Unit Operating Agreement for said Unit (the "Unit") and the owner of 100% working interest therein.

2. Devon is the Operator of the Turner "B" Waterflood Project as approved by State of New Mexico Oil Conservation Division Order No. R-3185 (the "Project") and the owner of 100% working interest therein.

3. The Unit Area of the Skelly Waterflood Unit includes, among other lands, the W/2 W/2 of Section 21, the W/2 NW/4 and NW/4 SW/4 of Section 28, all in Township 17 South, Range 31 East, Eddy County, New Mexico, and the Project Area for the Turner "B" Waterflood Project, includes, among other lands, the E/2 E/2 of Section 20, the NE/4 SE/4 and E/2 NE/4 of Section 29, all in Township 17 South, Range 31 East, Eddy County, New Mexico.

4. Wiser and Devon desire to enter into an agreement to provide for the continued operation of existing injection wells, the reactivation of existing shut-in injection wells, and the conversion of additional wells to injection as provided in Article 1, along the common boundary of the above described lands for the injection of water into one or more of the Seven Rivers, Queen, Grayburg, and San Andres formations underlying said lands in order to enhance the recovery of hydrocarbons from their respective Unit/Project. Wiser and Devon also desire to enter into an agreement/to/drill up to/six infill producing wells on 20 acre spacing units along the common boundary line of the Skelly Waterflood Unit and the Turner "B" Waterflood Project in accordance " with Article 7 below.

NOW, THEREFORE, in consideration of the mutual benefits to be derived from the covenants and obligations herein contained, Wiser and Devon agree as follows:

ARTICLE 1

INJECTION WELLS

1.1 Wiser has made application before the New Mexico Oil Conservation Division to convert, to injection or reactivate existing shat-in injection wells as follows:

Skelly Unit #62 Located in NW/4 NW/4 of Section 21-T17S-R31E Skelly Unit #63 Located in SW/4 NW/4 of Section 21-T17S-R31E Skelly Unit #69 Located in NW/4 SW/4 of Section 21-T17S-R31E Skelly Unit #74 Located in SW/4 SW/4 of Section 21-T17S-R31E Skelly Unit #91 Located in NW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #92 Located in SW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #92 Located in SW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #92 Located in SW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #92 Located in SW/4 NW/4 of Section 28-T17N-R31E

Within one hundred twenty (120) days of receipt of approval by the New Mexico Oil Conservation Division, Wiser shall convert, reactivate and equip the above wells as necessary, for the injection of water into one or more of the Seven Rivers, Queen, Grayburg, and San Andres formations. These wells shall be equipped, maintained and operated under this agreement, and the

covenants of Wiser under this agreement shall be performed at the expense of Wiser as an item of unit expense under the Unit Operating Agreement for the Skelly Waterflood Unit.

1.2 Devon, within thirty (30) days after execution of this agreement, shall make application before the New Mexico Oil Conservation Division to convert to injection or reactivate existing shut-in injection wells as follows:

Turner "B" #11 Located in SE/4 NE/4 of Section 20-T17S-R31E Turner "B" #9 Located in NE/4 NE/4 of Section 20-T17S-R31E Turner "B" #51 Located in NE/4 SE/4 of Section 20-T17S-R31E Turner "B" #59 Located in NE/4 NE/4 of Section 29-T17S-R31E Turner "B" #62 Located in NE/4 SE/4 of Section 29-T17S-R31E

Within one hundred twenty (120) days of receipt of approval by the New Mexico Oil Conservation Division, Devon shall convert, reactivate, and equip the above wells as necessary, for the injection of water into one or more of the Seven Rivers, Queen, Grayburg, and San Andres formations. These wells shall be equipped, maintained and operated under this agreement, and the covenants of Devon under this agreement shall be performed at the sole expense and risk of Devon.

1.2.1 Wiser and Devon recognize that the following Devon operated wells have previously been converted to injection and are currently injecting water into one or more of the Seven Rivers, Queen, Grayburg and San Andres formations:

Turner "B" #46 Located in SE/4 SE/4 of Section 20-T17S-R31E Turner "B" #55 Located in SE/4 NF/4 of Section 29-T17S-R31E

The above wells shall continue to be operated in accordance with the terms of this agreement and more specifically in accordance with Article 2.2 hereof.

1.3 <u>Well Log</u>: Upon execution of this agreement and upon request, each party shall provide the other party with a copy of a porosity log on each of the wells contemplated by this agreement, indicating perforation depth. Each party, upon request, shall also provide the other party with details of workover operations on each of the wells, including stimulation and squeezing operations.

1.4 <u>Replacement and Substitute Wells</u>: It is recognized by the parties that the incremental recovery of hydrocarbons reasonably expected from each Unit/Project Area as a result of the injection operations contemplated by this agreement may not justify the drilling of a replacement well in the event a party is unable to continue operations of existing injection wells or is unable to convert its well to an injection well or to obtain governmental authorization to inject fluids into the well. If, as a result of a lack of wellbore integrity or other condition in the hole or formations penetrated, either party is unable after exercising reasonable diligence as would a prudent operator to continue operations of existing injection wells or to convert the wells described in Articles 1.1, 1.2 and 1.2.1 herein to injection wells or to obtain governmental authorization to inject fluids into the Seven Rivers, Queen, Grayburg and San Andres formations, said party shall, within thirty (30) days, notify the other party hereto in writing of the condition of such well and shall have the option but not the obligation to propose either to substitute an existing well therefor, or to drill a replacement well at a location within three hundred (300) feet of the well to be replaced.

If the notifying party has elected to drill a replacement well, it shall, within a reasonable time after giving the above described notice, begin operations for the drilling of the replacement well. If it has chosen to propose a substitute well, the remaining party hereto may either accept or reject the proposed substitute well. If the notifying party proposes a substitute well that is acceptable to the remaining party hereto, the notifying party shall drill and equip said well within one hundred twenty (120) days after receiving the remaining party's written acceptance thereof. If the remaining party hereto rejects the proposed substitute well, such remaining party shall have the option to cease operating any adjacent injection well covered by this agreement.

ARTICLE 2

OPERATION

2.1 <u>Water Supply</u>: Each party either has constructed or shall construct and maintain facilities necessary for delivery of water to its injection wells and shall furnish water suitable for injection therein. Each party, upon request, shall provide the other party with a water analysis of its injection water.

Injection: Except as otherwise provided in Article 1.4 herein ("Replacement and 22 Substitute Wells"), water injection into each of the proposed conversion injection wells and reactivated injection wells shall commence within sixty (60) days after receipt of approval by the New Mexico Oil Conservation Division. Injection of water into each injection well covered by this agreement, shall be at rates and pressures mutually agreed upon, and below the fracturing pressure of the formation as determined by periodic step-rate injectivity tests. Prior to running a step-rate test, the operating pressure on the well shall be set at a level lower than the lowest fracturing pressures measured by step-rate tests in nearby injection wells completed in the formation. If the rates and pressures cannot be mutually agreed upon, the rate shall be at least 300 barrels of water a day, provided the rate docs not result in a bottomhole pressure which is greater than the formation fracturing pressure. Each party, upon request, shall provide the other party details of the results of each step-rate test and any fall-off tests conducted on its wells. Each month, each party shall provide the other party with a statement showing the average daily injection rate and the average daily injection pressure, for the previous month, along with the cumulative injection volumes, for all wells within 700 feet of the common unit boundary.

2.3 <u>Injection Profile</u>: Each party shall run annual radioactive water tracer surveys on its wells. Each party shall, upon request, provide a copy of its injection profile logs to the other party hereto.

2.4 <u>Metering</u>: Each party shall be responsible, at its sole cost and expense, for installing and maintaining in good repair, appropriate pressure gauges and water meters for each of the injection wells covered by this agreement.

ARTICLE 3

INTERESTS AND OBLIGATIONS OF PARTIES

3.1 Interests of Parties: Nothing in this agreement shall be deemed to be an assignment or a cross-assignment of interests in the respective Unit/Project Areas. This agreement is entered into for the sole purpose of providing for the operation of injection and infill producing wells on the common boundary of the Unit/Project Areas to enhance the recovery of hydrocarbons from each Unit/Project Area so that the party who operates the Unit/Project Area, along with the other owners of interests in production from the Unit/Project Area, may benefit by an increase in ultimate recovery of hydrocarbons from the Unit/Project Area.

3.2 <u>Obligations of Parties</u>: The obligations and liabilities of the parties shall be several, not joint or collective. Each party shall be responsible only for its obligations as set out in this agreement. It is not the intention of the parties to create, nor shall this agreement be construed to create, a mining or other partnership or association, or to render the parties liable as partners.

ARTICLE 4

FORCE MAJEURE

If either party is rendered unable, wholly or in part, by force majeure to carry out its obligations under this agreement, that party shall give to the other party prompt notice of the force majeure with reasonably fall particulars concerning it; thereupon, the obligations of the party giving notice, so far as they are affected by the force majeure, shall be suspended during, but no longer than the continuance of, the force majeure. The affected party shall use all reasonable diligence to remove the force majeure situation as quickly as practicable.

The requirement that any force majoure shall be remedied with all reasonable dispatch shall not require the settlement of strikes, lockouts, or other labor difficulty by the party involved, contrary to its wishes, how all such difficulties shall be bandled shall be entirely within the discretion of the party concerned.

The term "force majeure", as here employed shall mean an act of God, strike, lockout or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightning, fire, storm, flood, explosion, governmental action, governmental delay, restraint or inaction, unavailability of equipment, failure of water supply, and any other cause, whether of the kind specifically enumerated above or otherwise, which is not reasonably within the control of the party claiming suspension.

ARTICLE 5

NOTICES

All notices and other communications authorized or required between the parties under this agreement shall be deemed to have been given when such communications in writing shall have been received by fax or United States mail, by the party to whom the notice is given at the following address:

Wiser:

Devon:

The Wiser Oil Company 8115 Preston Road, Suite 400 Dallas, TX 75225 Attn: Mait Eagleston Project Manager Devon Energy Corporation (Nevada) 20 North Broadway, Suite 1500 Oklahoma City, OK 73102 Attn: Steve Cromwell Land Manager

Each party shall have the right to change its address at any time, and from time to time, by giving written notice thereof to the other party.

ARTICLE 6

EFFECTIVE DATE AND TERM OF AGREEMENT

6.1 Effective Date: The effective date of this agreement shall be January 1, 1997.

6.2 <u>Term of Agreement</u>: This agreement shall be in effect for a period of five (5) years after the effective date hereof and so long thereafter as the Skelly Waterflood Unit, and the Turner "B" Waterflood Project are in effect, unless earlier terminated as hereafter set forth.

This agreement may be terminated at any time after the expiration of such five (5) year term by unanimous agreement of the parties hereto. If the parties are unable to agree, the term of this agreement shall not extend beyond ten (10) years from the cessation of operations attributable to the wells covered in Article 1 and Article 7 hereof.

ARTICLE 7

In order to further enhance the ultimate recovery of hydrocarbons from both the Skelly Waterflood Unit and the Turner "B" Waterflood Project, Wiser and Devon each agree to drill and operate three infill producing wells along the common boundary of the Unit/Project at the approximate locations described on Exhibit "A" attached hereto. Such wells shall be drilled and completed within one hundred eighty (180) days from the execution of this agreement. Wiser and Devon recognize that in order to be able to drill these infill wells at the proposed locations, each company will be required to obtain unorthodox location approval from the New Mexico Oil Conservation Division. Accordingly, Wiser and Devon hereby covenant to execute any waivers necessary for the remaining party hereto to administratively obtain such unorthodox locations in accordance with applicable New Mexico Oil Conservation Division rules.

In order to share in the risks and rewards of drilling the proposed infill wells, Wiser and Devon further agree that an operating agreement between the parties, designating Devon as operator of those infill wells located on the Turner "B" Lease, and further designating Wiser as operator of those infill wells located on the Skelly Unit, which shall be executed simultaneously with this agreement, is attached hereto as Exhibit "B" and made a part hereof. Said operating agreement shall govern the drilling, completion and all other operations associated with such infill wells. Notwithstanding the current working interest ownership of the Turner "B" Waterflood Project and the Skelly Waterflood Unit as recited in paragraphs 1 and 2 above, the working interest of the parties under said operating agreement shall be:

The Wiser Oil Company	50.00%
Devon Energy Corporation (Nevada)	50.00%

The operating agreement and exhibits thereto shall become effective as of the effective date of this agreement and shall govern any operations not expressly covered by this agreement. In the event of a conflict between the terms of the Operating Agreement attached hereto as Exhibit "B" and the terms of this agreement, the terms of this agreement shall prevail.

Production attributable to the Devon operated infill wells as set forth on Exhibit "A" shall be commingled into an existing Turner "B" tank battery of Devon's choice. Production attributable to the Wiser operated infill wells as set forth on Exhibit "A" shall be commingled into an existing Skelly Waterflood tank battery of Wiser's choice. Wiser and Devon agree that production from such infill wells shall be allocated based upon monthly well tests. Well testing shall be accomplished utilitizing a test heater treater or test separator. Produced fluid from a well to be tested will be segregated from the field production and diverted to a test vessel where the separation of oil, gas and water will occur. Only one well shall be tested at a time. No other wells shall be allowed to produce into the test vessel when another well is being tested. Oil and water volumes exiting the vessel will be metered or sent to a test tank for direct measurement.

If metering oil volumes, meter accuracy should be at least $\pm 1.0\%$ with a repeatability of at least $\pm 0.05\%$. Oil meters should be calibrated on a quarterly basis with each party having the right, upon thirty (30) days written notice, to witness such oil meter calibrations. Any time the accuracy of a meter is in question either party with reasonable written notification may inspect the other party's oil meter at their own expense.

Gas volumes may be allocated based on the applicable Project or Unit GOR, or gas volumes may be measured using an orifice well tester connected to the gas outlet on the heater treater or test separator.

ARTICLE 8

COMPLIANCE WITH LAWS AND REGULATIONS

8.1 <u>Laws. Regulations and Orders</u>: This agreement shall be subject to and operations hereunder shall be conducted in compliance with the conservation laws of the State of New Mexico, the valid rules, regulations and orders of the New Mexico Oil Conservation Division and all other applicable federal, state and local laws, ordinances, rules, regulations and orders.

8.2 <u>Governing Law:</u> This agreement and all matters pertaining hereto, including, but not limited to, matters of performance, nonperformance, breach, remedies, procedures, rights, duties and interpretations or construction, shall be governed and determined by the law of the State of New Mexico.

ARTICLE 9

INDEMNITY

Each party hereto agrees to protect, defend, indemnify and hold harmless the other party from and against any claims, demands, causes of action, losses and/or liabilities of every kind and character arising out of, incident to, or in connection with such other party's water injection operations possible to the provisions of this agreement excepting, however, any claim, demand, cause of action, loss and/or liability which may result from the gross negligence or willful misconduct of such other party, its agents, officers, or employees. Such indemnity shall include, without limitation, reasonable attorney's fees, court costs and similar expenses. Each party hereby releases the other party from any liability for damages to the releasing party's interest in and to the releasing party's land described herein, arising out of, incident to, or in connection with the operations contemplated by this agreement, provided such operations are conducted in accordance with the terms and conditions of this agreement and such damage is not the result of gross negligence or willful misconduct of such other party.

ARTICLE 10

MISCELLANEOUS

10.1 <u>Entire Agreement</u>: This agreement embodies the entire agreement between the parties relating to the subject matter hereof and shall supersede all other agreements, assurances, conditions, covenants or terms relating hereto, whether written or verbal or antecedent or contemporaneous with the execution thereof. This agreement may be modified or amended only by an instrument in writing signed by both parties.

10.2 <u>Captions</u>: Captions have been inserted for reference purposes only and shall not define or limit the terms of this agreement.

10.3 <u>Binding Effect</u>: This agreement shall be binding upon and shall inure to the benefit of the parties hereto and to their respective successors, legal representatives and assigns.

WITNESS EXECUTION this 25th day of april , 1997.

ATTEST:

By:

By: W. B. Phillips

ATTEST:

By: At. STEVE CROANNEL

DEVON ENERGY CORPORATION (NEVADA)

EXHIBIT "A"

*

-4

.

Attached to and made a part of that certain Joint Operating Agreement dated January 1, 1997 by and between The Wiser Oil Company and Devon Energy Corporation (Nevada)

Ł	CONTRACT AREA:		OPERATOR:
# 400 # 401 # 402	Storily Loast Well #258, 10 FSL and 10 FWL, Section 21-T17S-R31E Storily Unit Well #271, 1300 FNL and 10 FWL, Section 28-T17S-R31E Skelly Unit Well #282, 2625 FNL and 10 FWL, Section 28-T17S-R31E Turner B-134, 1350 FNL and 10 FEL, Section 20-T17S-R31E Turner B-135, 2625 FNL and 10 FEL, Section 20-T17S-R31E Turner B-136, 3900 FNL and 10 FEL, Section 20-T17S-R31E ADDRESSES FOR NOTICE PURPOSES:		The Wiser Oil Company The Wiser Oil Company The Wiser Oil Company Devon Energy Corporation (Nevada) Devon Energy Corporation (Nevada) Devon Energy Corporation (Nevada)
R. -	The Wiser Oil Company 8115 Preston Road, Suite 400 Dallas, TX 75225 Attn: Mati Eagleston Project Manager	Devon Energy Corpora 20 North Broadway, Si Oklahoma City, OK 73 Attn.: Steve Cromw Land Manage	nite 1500 102 eff
m .	PERCENTAGE WORKING INTERESTS Parties The Wiser Oil Company Devon Energy Corporation (Nevada) Totals	Po Wor in t	ercentage king Interest <u>Contract Area</u> 50.00% . <u>50.00%</u>
IV.		or untivided interests therein, comm ND ONLY INSOFAR, as each cov ands of Eddy County, New Mexico.	itted to this Agrocrucut by the parties hereto and listed ers lands and depths within the Contract Area. All

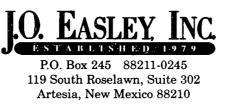
Α.	Leases committed by The Wiser Oil Company (100%):	·		RECORDING
LESSOR	LESSPE	LEASE DATE	LESSOR ROY.	CTCHER BURDENR	REFERENCES BOOK PAGE
USA #LC-029420-B	Sizelly (30 Company	4/30/38	ail9210000 gan1250000	.0100600 ORRI	

Leases committed by Devon Energy Corporation (Nevada) (100%):

LESSOR	LESSEE	LEASE DATE	LESSOR ROY.	other Burdens	RECORDING REFERENCES BOOK PAGE
USA #142-025095-U	Dunciger Oil & Retining Co.	41.46	oil ~ .0210000 gm= . (250000	- O -	

NSL





September 3, 1997

Telephone (505) 746-1070 Fax (505) 746-1073

9/29/97



Mr. William Lemay New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

Re: Application for Administrative Approval to Drill a Directional Well to an Unorthodox Bottom Hole Location Skelly Unit #400 Skelly Waterflood Unit Eddy County, New Mexico

Dear Mr. Lemay:

The Wiser Oil Company hereby applies for administrative approval to drill a directional well at a surface location of 100' FSL, 260' FWL, with the bottom hole location at 10' FSL, 10' FWL, both within Unit M of Section 21, Township 17 South, Range 31 East, N.M.P.M. It is necessary to directionally drill this well as the prime location for drilling a straight hole is inaccessible due to the existence of pipelines running through the prime drillsite.

Attached to this application are the following exhibits:

- Exhibit "A" Survey Plat, Form C-102
- Exhibit "B" Plat showing the section, township, and range in which the well is to be drilled, the project area, the proposed surface & bottom-hole locations, the producing area for the proposed well, & all offsetting drilling units & existing wells
- Exhibit "C" Vertical Plan View (Cross-Section) for the subject well
- Exhibit "D" Horizontal Plan View for the subject well
- Exhibit "E" Type Log Section which is generally representative of the Skelly Unit. Wells have been drilled which have come in right on target as illustrated on this type log from the Caprock Maljamar Unit, but there is a tendency for Skelly Unit wells to come

in anywhere from 200' shallower to an extreme of 1000' shallower than illustrated on these logs.

Exhibit "F" Lease Line Agreement between The Wiser Oil Company and Devon Energy Corporation noting in Article 7 that each agrees to execute any waivers necessary to administratively obtain such unorthodox locations at the NMOCD. Devon being the only offset Operator, no Affidavit of Mailing was prepared, however, Devon is being provided a copy of this letter and application.

If you have any questions, or need additional information, please feel free to give me a call at 505-746-1070.

Sincerely,

J. O. EASLEY, INC

Michael R. Burch, CPL Agent for The Wiser Oil Company

Mr. Mike Jones

P. O. Box 2568

The Wiser Oil Company

Hobbs, New Mexico 88241

mrb/s Enclosures cc/enclosure

Mr. Tim W. Gum New Mexico Oil Conservation Division 811 South 1st Street Artesia, New Mexico 88210

Mr. Matt Eagleston The Wiser Oil Company 8115 Preston Road, Suite 400 Dallas, Texas 75225

Mr. Ken Gray Devon Energy Corporation 20 North Broadway, Suite 1500 Oklahoma City, OK 73102-8260

EXHIBIT "D"

ì	۰.		-	- 1		7		A."	1.1	۰,۲
DI	1	51	1	R	[(7	Г	I		<u>,</u>

x 1980, Hobbs, NM 85341-1980 Υ.

DISTRICT II P.O. Drawer DD, Artenia, NM 88211-0719

DISTRICT III

1000 Rio Brazos Rd., Astec, NM 87410

DISTRICT IV P.O. Box 2088, Santa Fc. NM 87504-2088

API Number

Property Code

30-015-

التعليد مسريا

State of New Mexico

Energy, Minerals and Natural Resources Department

.

in and

2.00 24

5

1.735 A. P. R. F.

÷.,

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

OIL CONSERVATION DIVISION P.O. Box 2088

Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

Well Number

25

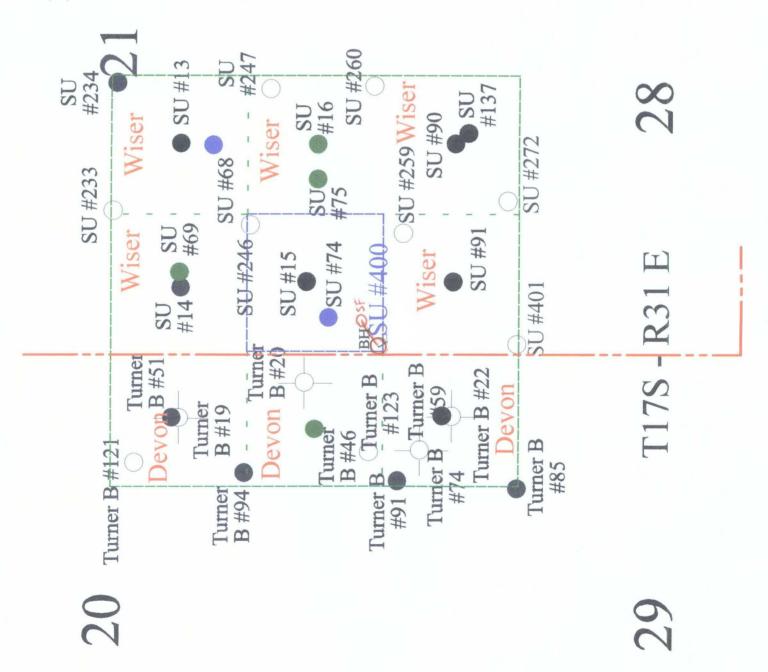
WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code 28509 Pool Name Grayburg Jackson 7-Rivers QN GB SA Property Name SKELLY UNIT

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
			Bottom	Hole Lo	cation If Diffe	erent From Sur	face		
М	21	17 S	31 E		100	SOUTH	260	WEST	EDDY
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
					Surface Loc	ation			
022922 THE WISER OIL COMPANY							3753		
OGRID No. Operator Name						Elevation			
0	17540			400					

M	21	175	3IE	10	SOUTH	10	WEST	EDDY
Dedicated Acres	e Joint or	Infill Co	nsolidation Cod	Order No.				
4								

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

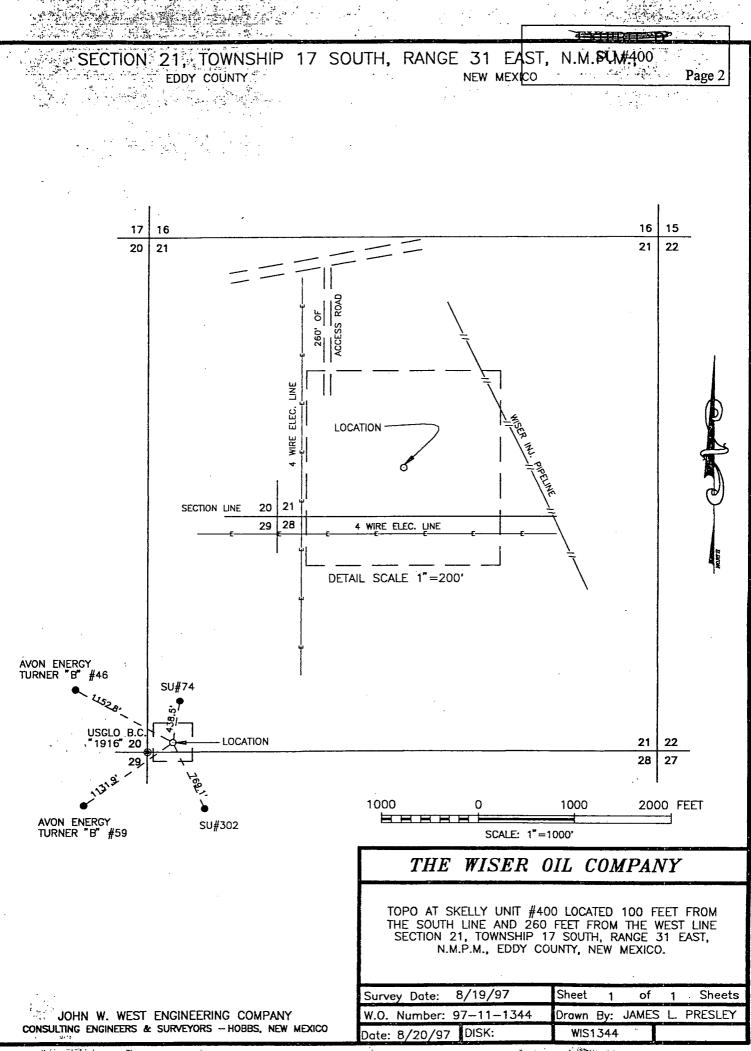
,			OPERATOR CERTIFICATION
			I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
	 		Milarth, Bush Signature
			Michael R. Burch, CPL Printed Name Agent for The Wiser Oil
	1		Title Company 9-3-97 Date
· ·	 	 	SURVEYOR CERTIFICATION
	3749.8'3754.5'		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 supervison and that the same is true and correct to the best of my belief.
7	3755.4* 3758.1*		AUGUST 19, 1997 Date Surveyed Willing JLF Signature D Soaf 40
	★		Protectional Surveyor
260' - 100'			Certificate No



Skelly Unit #400 Directionally Drilled Well

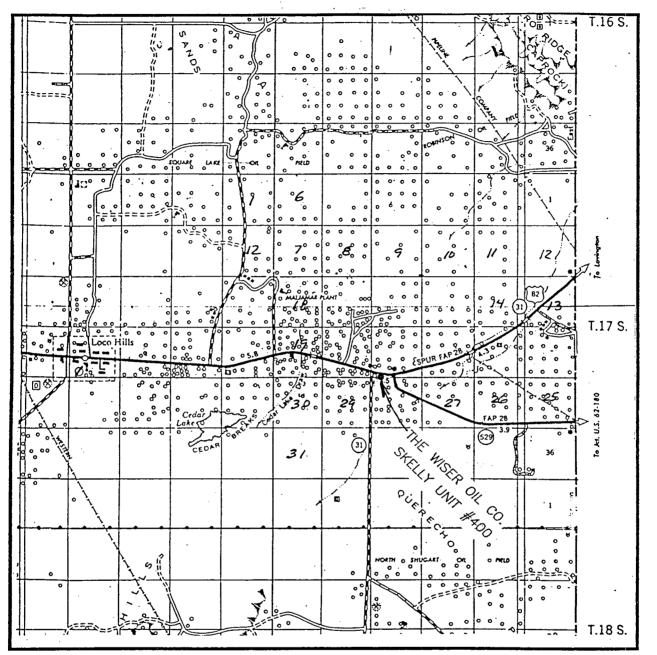
Offset Operators are shown in red (All offset tracts have been drilled) SU #400 Offset Drilling Area SU #400 Producing Area

- Production Facilities
- New Water Injection Well
- Existing Water Injection Well
 - Producing Oil Well
 - A Producing Gas Well
- Producing Oil & Gas Well
- Plugged and Abandoned Well
- Temporarily Abandoned Well



A COMPANY AND A REPORT OF A

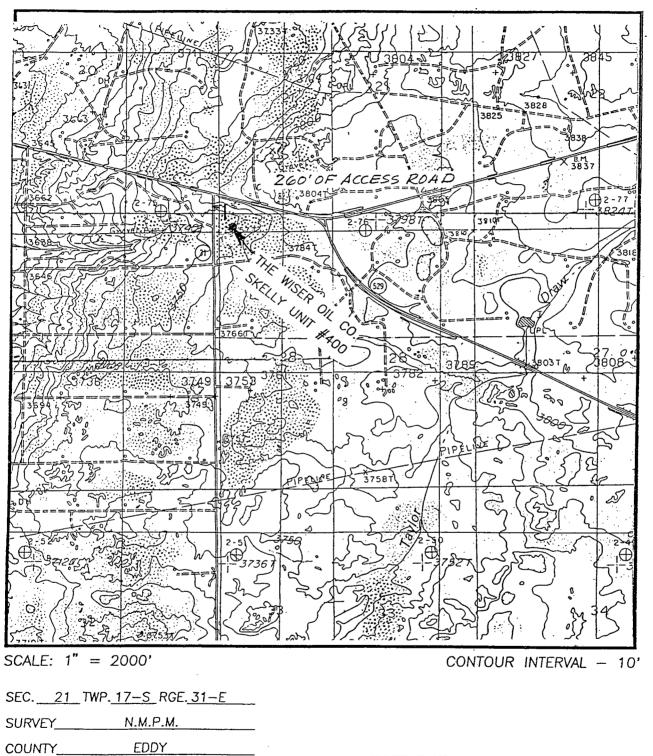
 VICINITY MAP



SCALE: 1'' = 2 MILES

SEC. <u>21</u> TWP.<u>17</u>—S RGE.<u>31</u>—E SURVEY N.M.P.M. COUNTY EDDY DESCRIPTION <u>100' FSL & 260' FWL</u> ELEVATION <u>3753'</u> OPERATOR <u>THE WISER OIL CO.</u> LEASE <u>SKELLY UNIT</u>

JOHN WEST ENGINEERING HOBBS, NEW MEXICO (505) 393-3117 LOCATION VERIFICATION MAP



DESCRIPTION 100' FSL & 260' FWL

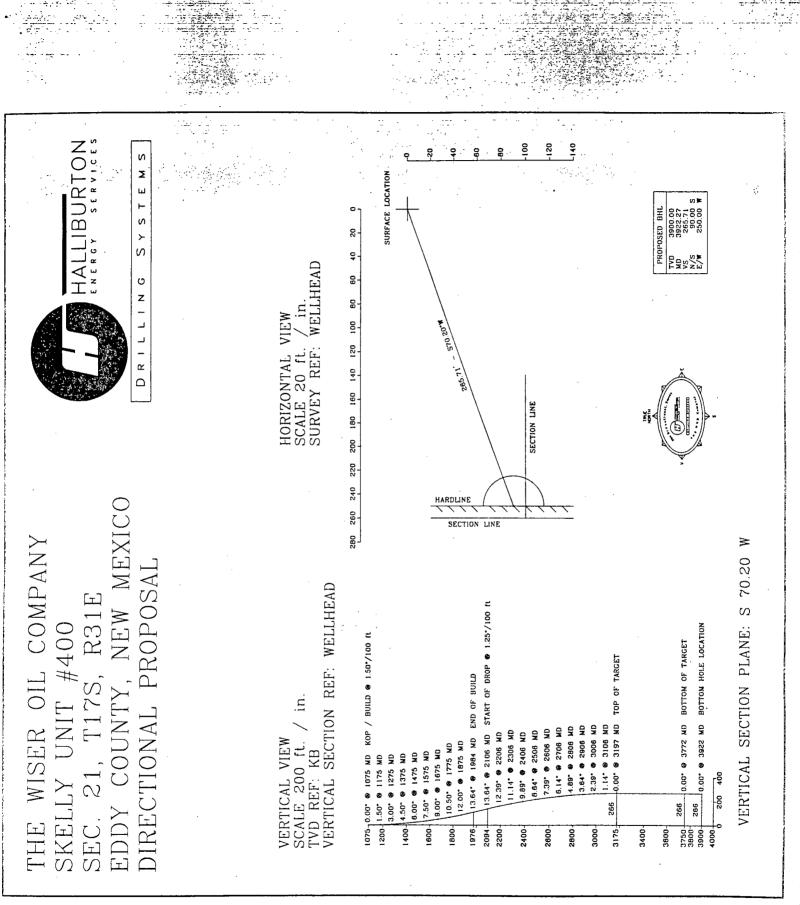
ELEVATION 3753'

OPERATOR THE WISER OIL CO. LEASE SKELLY UNIT

LOCO HILLS, & MALJAMAR, N.M.

U.S.G.S. TOPOGRAPHIC MAP

JOHN WEST ENGINEERING HOBBS, NEW MEXICO (505) 393-3117



HALLIBURTON DRILLING SYSTEMS

Page 1

Date: 8/22/97 Proposal Report Wellpath ID: DIRECTIONAL PROPOSAL Last Revision: 8/22/97

Calculated using the Minimum Curvature Method Computed using WIN-CADDS REV2.2.2 Vertical Section Plane: S 70.20 W

Cangeran .

Survey Reference: WELLHEAD Offset, Reference To WellHead: (ft): 0.00 N 0.00 E 0.00 TVD Vertical Section Reference: WELLHEAD Closure Reference: WELLHEAD TVD Reference: KB

THE WISER OIL COMPANY SKELLY UNIT #400 SEC. 21, T17S, R31E EDDY COUNTY, NEW MEXICO DIRECTIONAL PROPOSAL

Measured Depth	Incl	Drift Dir.	Course Length	TVD	T O Rectangula	T A L r Offsets	DLS	Vertical Section
(ft)	(deg.)	(deg.)	(ft)	(ft)	(ft)	(ft)	(dg/100ft)	(ft)
()	(=•9.)	(~-3.)	()	(,	X •-7		(()
KOP / BUIL	D @ 1.5	0 deg/100 ft			<u>. </u>	·.		
1075.00	0.00	N 0.00 E	0.00	1075.00	0.00 N	0.00 E	0.00	0.00
1175.00	1.50	S 70.20 W	100.00	1174.99	0.44 S	1.23W	1.50	1.31
1275.00	3.00	S 70.20 W	100.00	1274.91	1.77 S	4.93W	1.50	5.23
1375.00	4.50	S 70.20 W	100.00	1374.69	3.99 S	11.08W	1.50	11.77
1475.00	6.00	S 70.20 W	100.00	1474.27	7.09 S	19.69W	1.50	20.92
1575.00	7.50	S 70.20 W	100.00	1573.57	11.07 S	30.75W	1.50	32.68
1675.00	9.00	S 70.20 W	100.00	1672.54	15.93 S	44.25W	1.50	47.03
1775.00	10.50	S 70.20 W	100.00	1771.09	21.67 S	60.18W	1.50	63.96
1875.00	12.00	S 70.20 W	100.00	1869.16	28.27 S	78.54W	1.50	83.47
1975.00	13.50	S 70.20 W	100.00	1966.70	35.75 S	99.30W	1.50	105.54
END OF BL								
1984.13	13.64	S 70.20 W	9.13	1975.57	36.47 S	101.31W	1.50	107.68
) 1.25 deg/1	00 ft					
2106.32	13.64	S 70.20 W	122.20	2094.32	46.23 S	128.42W	0.00	136.49
2206.32	12.39	S 70.20 W	100.00	2191.75	53.86 S	149.61W	1.25	159.01
2306.32	11.14	S 70.20 W	100.00	2289.65	60.76 S	168.79W	1.25	179.39
2406.32	9.89	S 70.20 W	100.00	2387.97	66.94 S	185.95W	1.25	197.63
2506.32	8.64	S 70.20 W	100.00	2486.66	72.39 S	201.09W	1.25	213.73
2606.32	7.39	S 70.20 W	100.00	2585.68	77.11 S	214.21W	1.25	227.66
2706.32	6.14	S 70.20 W	100.00	2684.99	81.10 S	225.29W	1.25	239.44
2806.32	4.89	S 70.20 W	100.00	2784.52	84.36 S	234.32W	1.25	249.04
2906.32	3.64	S 70.20 W	100.00	2884.24	86.87 S	241.31W	1.25	256.48
3006.32	2.39	S 70.20 W	100.00	2984.10	88.65 S	246.26W	1.25	261.73

HALLIBURTON DRILLING SYSTEMS Page 2 Date: 8/22/97 Date: 8/22/97 Proposal Report Wellpath ID: DIRECTIONAL PROPOSAL

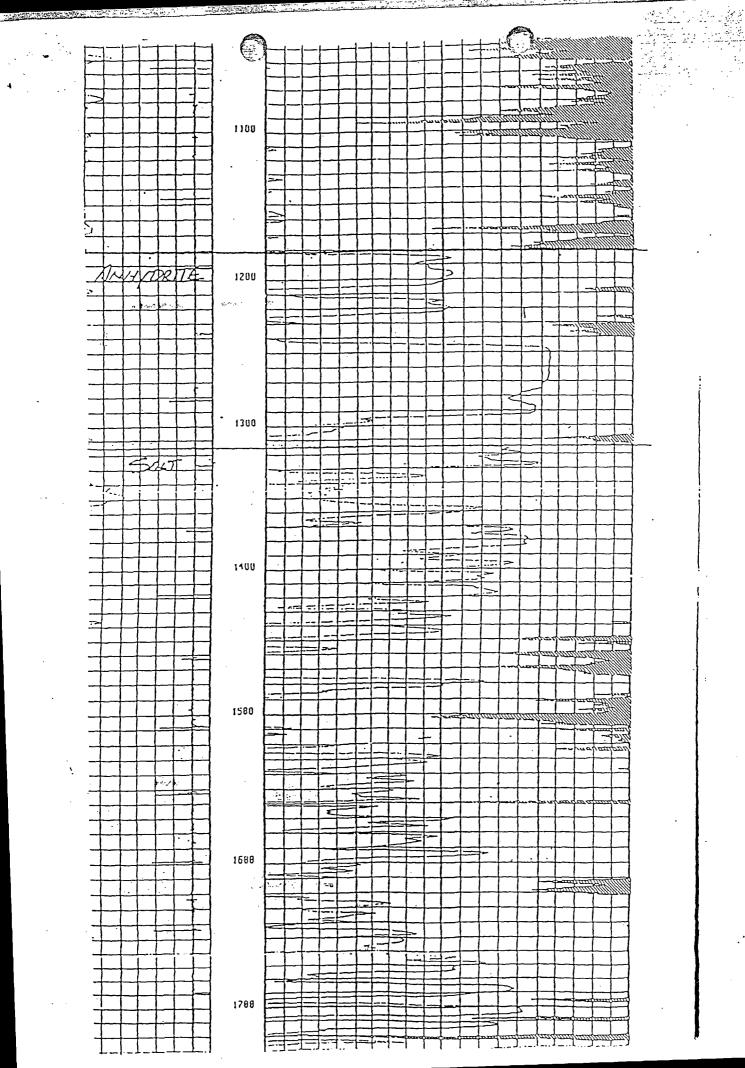
Measured Depth (ft)	lncl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	T O Rectangula (ft)	T A L r Offsets (ft)	DLS (dg/100ft)	Vertical Section (ft)
3106.32	1.14	S 70.20 W	100.00	3084.05	89.69 S	249.15W	1.25	264.80
TOP OF TAR	GET	•			•	$\boldsymbol{\mu}^{(1)}$		
3197.27	0.00	N 0.00 E	90.95	3175.00	90.00 S	250.00W	1.25	265.71
BOTTOM OF	TARG	ET						
3772.27	0.00	N 0.00 E	575.00	3750.00	90.00 S	250.00W	0.00	265.71
воттом но		CATION				,		
3922.27	0.00	N 0.00 E	150.00	3900.00	90.00 S	250.00W	0.00	265.71

Stow 129 Ch.b. Frit-Build CMUZ TOPS 1ANON

<u> 1777 - F</u>

LOG GAMMA COLLAR . LIBURTON DSN l COMPANY WISER OIL COMPANY INC. 1 KC × × CRAYUURG Jucc COMPANY 2MU #:53 FIELO SAUJAMAR SRATBURS SAN ANDRES TINCOS S141E N.M. 123 HISCR OIL H 160 API NO. 32-025-32327 101-18 51941225 LOCATION I CKU **XVL** 5 ·231.2637. 481FS1 4 1571 FVL UNIT LETTER # ..i <u>_</u>[] CONP. 1. •• 11 COUNTY: 41.1 NCL. 122. 17-5 RSE. 33-E ELEV. 4:37. PERMANENT DATUM SL ELEV. : 4.9. 4:45 LOG REASURED FROM DRILLING REAS FROM кз 12.3 FT. ABOVE PERS. DATUS).= (... 4:3** 12/08/95 2 DEICE/TYPE OF FLUID IN HOLE 4752 DATE & TIME LOSSED ANN NO. DEPTH - ORILLER · • 14850 FLUID LEVEL DEPTH - LOGGER BTA LOCSEC INTERVAL 14768 CEMENT TOP ESTALDOSED NA 4787 EDUIPMENT : LOCATION - 7634 :-2355 TOP LOSCED INTERVAL SURF IRECORDED BY LETHERSED BY - 54 HAX RECORDED TEAP. · | KA CERENTING DATA SURF STRIKS INT. STRING : PROD. STRING T LINER DATE/TIME CEMENTED 1 PRIMARY/SOUEEZE COMPRESSIVE STR. <u>ب</u>ع EXPECTED e : . . Hes-Hes Hes 1 CERENT VOLUME CENENT ITPE/WEICHT AUG ITPE/MUD WCT. FORMULATION RUN BOREHOLE RECORD CASING AND TURING RECORD BIT SZ. | FROM SIZE NCT. FROM. : 13 · Xa. 10 Ē 8.625 a ONE KA. 1 1290 8 10.1 17.0 <850 IN0 7.675 1200 -4858 5.5 9

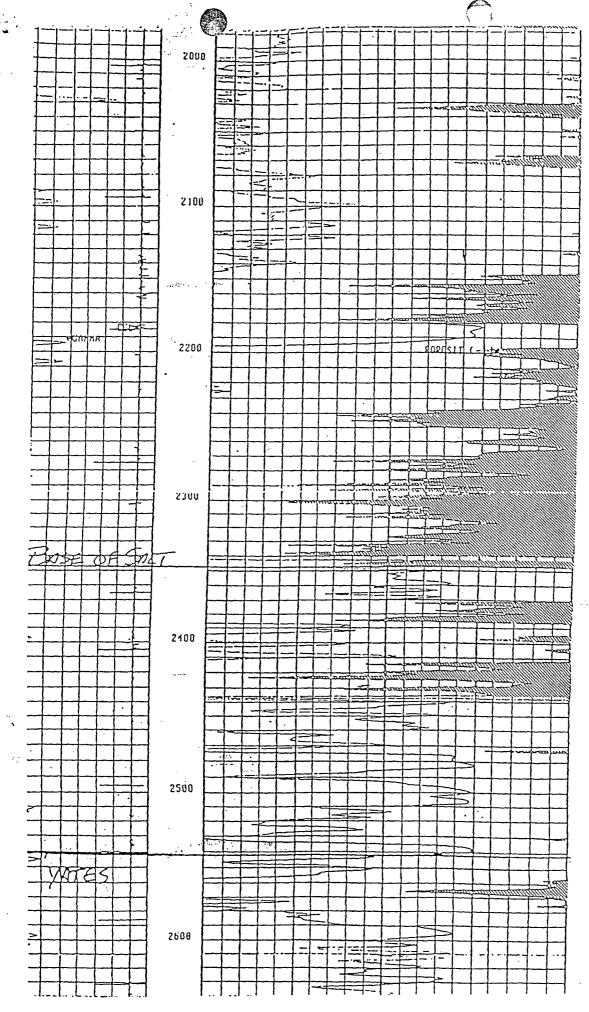
. анц 1940) e i Baserra 17-2

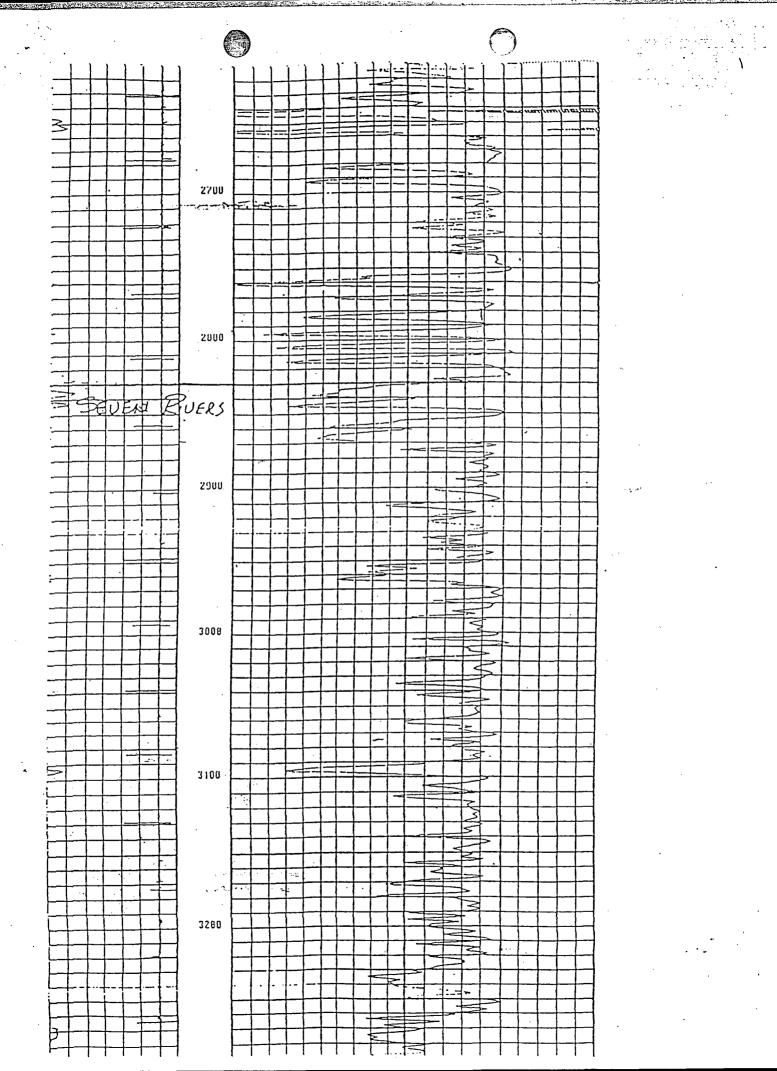


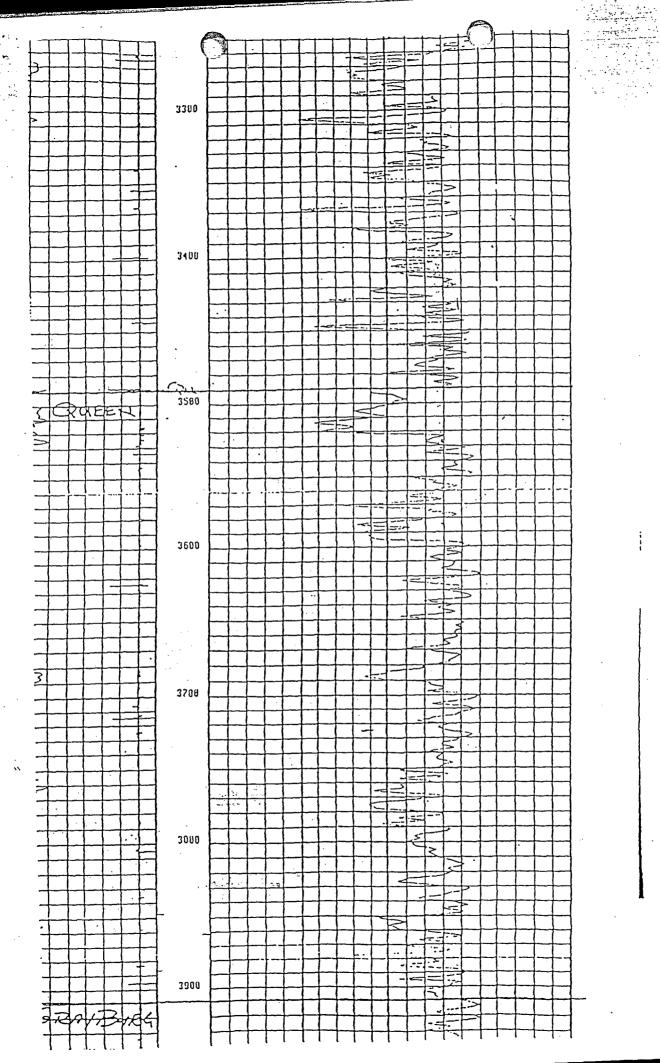
<u>-</u>

Ξ,

....



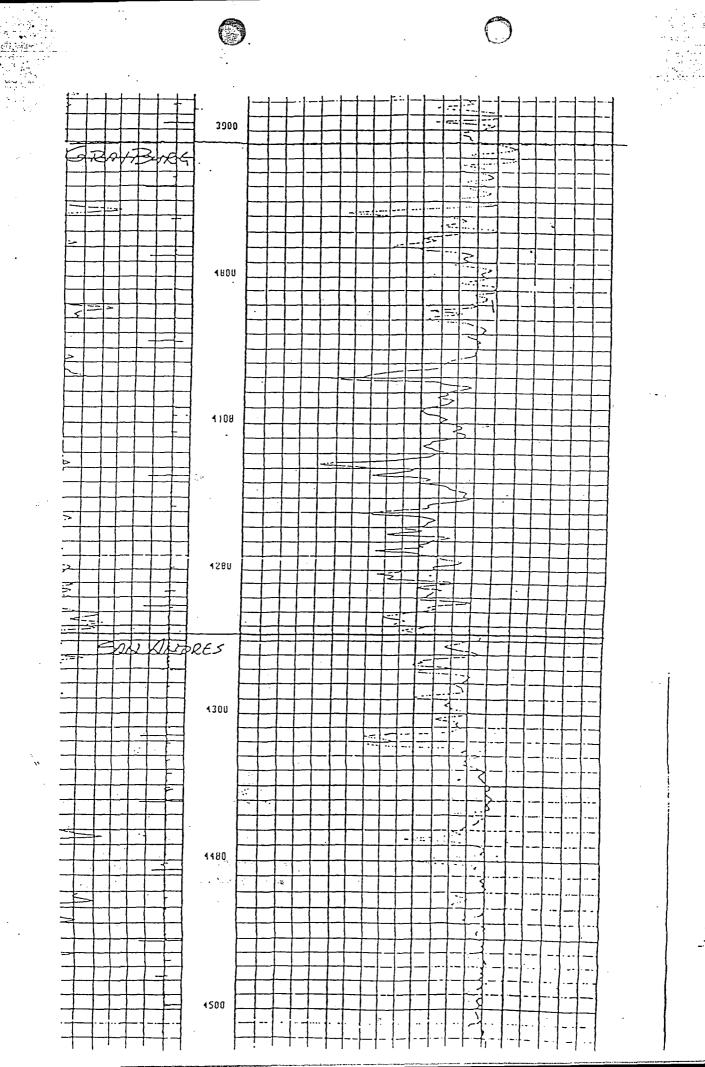




ł

,

-



÷ 21.2

COOPERATIVE UNIT LINE INJECTION WELL AND UNIT LINE INFILL DRILLING AGREEMENT

SKELLY WATERFLOOD UNIT TURNER "B" WATERFLOOD PROJECT

THIS AGREEMENT is entered into by The Wiser Oil Company as Operator of the Skelly Waterflood Unit, hereafter referred to as "Wiser", and Devon Energy Corporation (Nevada), as Operator of the Turner "B" Waterflood Project, hereafter referred to as "Devon".

RECTTALS:

1. Wiser is the Operator of the Skelly Waterflood Unit under the terms of the applicable Unit Agreement and the Unit Operating Agreement for said Unit (the "Unit") and the owner of 100% working interest therein.

2. Devon is the Operator of the Turner "B" Waterflood Project as approved by State of New Mexico Oil Conservation Division Order No. R-3185 (the "Project") and the owner of 100% working interest therein.

3. The Unit Area of the Skelly Waterflood Unit includes, among other lands, the W/2 W/2 of Section 21, the W/2 NW/4 and NW/4 SW/4 of Section 28, all in Township 17 South, Range 31 East, Eddy County, New Mexico, and the Project Area for the Turner "B" Waterflood Project, includes, among other lands, the E/2 E/2 of Section 20, the NE/4 SE/4 and E/2 NE/4 of Section 29, all in Township 17 South, Range 31 East, Eddy County, New Mexico.

4. Wiser and Devon desire to enter into an agreement to provide for the continued operation of existing injection wells, the reactivation of existing shut-in injection wells, and the conversion of additional wells to injection as provided in Article 1, along the common boundary of the above described lands for the injection of water into one or more of the Seven Rivers, Queen, Grayburg, and San Andres formations underlying said lands in order to enhance the recovery of hydrocarbons from their respective Unit/Project. Wiser and Devon also desire to enter into an agreement to drive in the skelly Waterflood Unit and the Turner "B" Waterflood Project in accordance "with Article 7 below.

NOW, THEREFORE, in consideration of the mutual benefits to be derived from the covenants and obligations herein contained, Wiser and Devon agree as follows:

ARTICLE 1

INJECTION WELLS

1.1 Wiser has made application before the New Mexico Oil Conservation Division to convert to injection or reactivate existing shut-in injection wells as follows:

Skelly Unit #62 Located in NW/4 NW/4 of Section 21-T17S-R31E Skelly Unit #63 Located in SW/4 NW/4 of Section 21-T17S-R31E Skelly Unit #64 Located in NW/4 SW/4 of Section 21-T17S-R31E Skelly Unit #74 Located in SW/4 SW/4 of Section 21-T17S-R31E Skelly Unit #91 Located in NW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #92 Located in SW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #92 Located in SW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #92 Located in NW/4 SW/4 of Section 28-T17N-R31E

Within one hundred twenty (120) days of receipt of approval by the New Mexico Oil Conservation Division, Wiser shall convert, reactivate and equip the above wells as necessary, for the injection of water into one or more of the Seven Rivers, Queen, Grayburg, and San Andres formations. These wells shall be equipped, maintained and operated under this agreement, and the



covenants of Wiser under this agreement shall be performed at the expense of Wiser as an item of unit expense under the Unit Operating Agreement for the Skelly Waterflood Unit.

1.2 Devon, within thirty (30) days after execution of this agreement, shall make application before the New Mexico Oil Conservation Division to convert to injection or reactivate existing shut-in injection wells as follows:

Turner "B" #11 Located in SE/4 NE/4 of Section 20-T17S-R31E Turner "B" #9 Located in NE/4 NE/4 of Section 20-T17S-R31E Turner "B" #51 Located in NE/4 SE/4 of Section 20-T17S-R31E Turner "B" #59 Located in NE/4 NE/4 of Section 29-T17S-R31E Turner "B" #62 Located in NE/4 SE/4 of Section 29-T17S-R31E

Within one hundred twenty (120) days of receipt of approval by the New Mexico Oil Conservation Division, Devon shall conven, reactivate, and equip the above wells as necessary, for the injection of water into one or more of the Seven Rivers, Queen, Grayburg, and San Andres formations. These wells shall be equipped, maintained and operated under this agreement, and the covenants of Devon under this agreement shall be performed at the sole expense and risk of Devon.

1.2.1 Wiser and Devon recognize that the following Devon operated wells have previously been converted to injection and are currently injecting water into one or more of the Seven Rivers, Queen, Grayburg and San Andres formations:

Turner "B" #46 Located in SE/4 SE/4 of Section 20-T17S-R31E Turner "B" #55 Located in SE/4 NF/4 of Section 29-T17S-R31E

The above wells shall continue to be operated in accordance with the terms of this agreement and more specifically in accordance with Article 2.2 hereof.

1.3 <u>Well Log</u>: Upon execution of this agreement and upon request, each party shall provide the other party with a copy of a porosity log on each of the wells contemplated by this agreement, indicating perforation depth. Each party, upon request, shall also provide the other party with details of workover operations on each of the wells, including stimulation and squeezing operations.

1.4 <u>Replacement and Substitute Wells</u>: It is recognized by the parties that the incremental recovery of hydrocarbons reasonably expected from each Unit/Project Area as a result of the injection operations contemplated by this agreement may not justify the drilling of a replacement well in the event a party is unable to continue operations of existing injection wells or is unable to convert its well to an injection well or to obtain governmental authorization to inject fluids into the well. If, as a result of a lack of wellbore integrity or other condition in the hole or formations penetrated, either party is unable, after exercising reasonable diligence as would a prudent operator to continue operations of existing injection wells or to convert the wells described in Articles 1.1, 1.2 and 1.2.1 herein to injection wells or to obtain governmental authorization to inject fluids into the Seven Rivers, Queen, Grayburg and San Andres formations, said party shall, within thirty (30) days, notify the other party hereto in writing of the condition of such well and shall have the option but not the obligation to propose either to substitute an existing well therefor, or to drill a replacement well at a location within three hundred (300) feet of the well to be replaced.

If the notifying party has elected to drill a replacement well, it shall, within a reasonable time after giving the above described notice, begin operations for the drilling of the replacement well. If it has chosen to propose a substitute well, the remaining party hereto may either accept or reject the proposed substitute well. If the notifying party proposes a substitute well that is acceptable to the remaining party hereto, the notifying party shall drill and equip said well within one hundred twenty (120) days after receiving the remaining party's written acceptance thereof. If the remaining party hereto rejects the proposed substitute well, such remaining party shall have the option to cease operating any adjacent injection well covered by this agreement.

ARTICLE 2

OPERATION

2.1 <u>Water Supply</u>: Each party either has constructed or shall construct and maintain facilities necessary for delivery of water to its injection wells and shall furnish water suitable for injection therein. Each party, upon request, shall provide the other party with a water analysis of its injection water.

Except as otherwise provided in Article 1.4 herein ("Replacement and 2.2 Injection: Substitute Wells"), water injection into each of the proposed conversion injection wells and reactivated injection wells shall commence within sixty (60) days after receipt of approval by the New Mexico Oil Conservation Division. Injection of water into each injection well covered by this agreement, shall be at rates and pressures mutually agreed upon, and below the fracturing pressure of the formation as determined by periodic step-rate injectivity tests. Prior to running a step-rate test, the operating pressure on the well shall be set at a level lower than the lowest fracturing pressures measured by step-rate tests in nearby injection wells completed in the formation. If the rates and pressures cannot be mutually agreed upon, the rate shall be at least 300 barrels of water a day, provided the rate does not result in a bottomhole pressure which is greater than the formation fracturing pressure. Each party, upon request, shall provide the other party details of the results of each step-rate test and any fall-off tests conducted on its wells. Each month, each party shall provide the other party with a statement showing the average daily injection rate and the average daily injection pressure, for the previous month, along with the cumulative injection volumes, for all wells within 700 feet of the common unit boundary.

2.3 <u>Injection Profile</u>: Each party shall run annual radioactive water tracer surveys on its wells. Each party shall, upon request, provide a copy of its injection profile logs to the other party hereto.

2.4 <u>Metering</u>: Each party shall be responsible, at its sole cost and expense, for installing and maintaining in good repair, appropriate pressure gauges and water meters for each of the injection wells covered by this agreement.

ARTICLE 3

INTERESTS AND OBLIGATIONS OF PARTIES

3.1 <u>Interests of Parties</u>: Nothing in this agreement shall be deemed to be an assignment or a cross-assignment of interests in the respective Unit/Project Areas. This agreement is entered into for the sole purpose of providing for the operation of injection and infill producing wells on the common boundary of the Unit/Project Areas to enhance the recovery of hydrocarbons from each Unit/Project Area so that the party who operates the Unit/Project Area, along with the other owners of interests in production from the Unit/Project Area, may benefit by an increase in ultimate recovery of hydrocarbons from the Unit/Project Area.

3.2 <u>Obligations of Parties</u>: The obligations and liabilities of the parties shall be several, not joint or collective. Each party shall be responsible only for its obligations as set out in this agreement. It is not the intention of the parties to create, nor shall this agreement be construed to create, a mining or other partnership or association, or to render the parties liable as partners.

ARTICLE 4

FORCE MAJEURE

If either party is rendered unable, wholly or in part, by force majeure to carry out its obligations under this agreement, that party shall give to the other party prompt notice of the force majeure with reasonably full, particulars concerning it; thereupon, the obligations of the party giving notice, so far as they are affected by the force majeure, shall be suspended during, but no longer than the continuance of, the force majeure. The affected party shall use all reasonable diligence to remove the force majeure situation as quickly as practicable.

The requirement that any force majoure shall be remedied with all reasonable dispatch shall not require the settlement of strikes, lockouts, or other labor difficulty by the party involved, contrary to its wishes, how all such difficulties shall be handled shall be entirely within the discretion of the party concerned.

The term "force majeure", as here employed shall mean an act of God, strike, lockout or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightning, fire, storm, flood, explosion, governmental action, governmental delay, restraint or inaction, unavailability of equipment, failure of water supply, and any other cause, whether of the kind specifically enumerated above or otherwise, which is not reasonably within the control of the party claiming suspension.

ARTICLE 5

NOTICES

All notices and other communications authorized or required between the parties under this agreement shall be deemed to have been given when such communications in writing shall have been received by fax or United States mail, by the party to whom the notice is given at the following address:

Wiser:

Devon:

The Wiser Oil Company 8115 Preston Road, Suite 400 Dallas, TX 75225 Attn: Matt Eagleston Project Managet Devon Energy Corporation (Nevada) 20 North Broadway, Suite 1500 Okłahoma City, OK 73102 Attn: Steve Cromwell Land Manager

Each party shall have the right to change its address at any time, and from time to time, by giving written notice thereof to the other party.

ARTICLE 6

EFFECTIVE DATE AND TERM OF AGREEMENT

6.1 Effective Date: The effective date of this agreement shall be January 1, 1997.

6.2 <u>Term of Agreement</u>: This agreement shall be in effect for a period of five (5) years after the effective date hereof and so long thereafter as the Skelly Waterflood Unit, and the Turner "B" Waterflood Project are in effect, unless earlier terminated as hereafter set forth.

This agreement may be terminated at any time after the expiration of such five (5) year term by unanimous agreement of the parties hereto. If the parties are unable to agree, the term of this agreement shall not extend beyond ten (10) years from the cessation of operations attributable to the wells covered in Article 1 and Article 7 hereof.

ARTICLE 7

In order to further enhance the ultimate recovery of hydrocarbons from both the Skelly Waterflood Unit and the Turner "B" Waterflood Project, Wiser and Devon each agree to drill and operate three infill producing wells along the common boundary of the Unit/Project at the approximate locations described on Exhibit "A" attached hereto. Such wells shall be drilled and completed within one hundred eighty (180) days from the execution of this agreement. Wiser and Devon recognize that in order to be able to drill these infill wells at the proposed locations, each company will be required to obtain unorthodox location approval from the New Mexico Oil Conservation Division. Accordingly, Wiser and Devon hereby covenant to execute any waivers necessary for the remaining party hereto to administratively obtain such unorthodox locations in accordance with applicable New Mexico Oil Conservation Division rules.

In order to share in the risks and rewards of drilling the proposed infill wells, Wiser and Devon further agree that an operating agreement between the parties, designating Devon as operator of those infill wells located on the Turner "B" Lease, and further designating Wiser as operator of those infill wells located on the Skelly Unit, which shall be executed simultaneously with this agreement, is attached hereto as Exhibit "B" and made a part hereof. Said operating agreement shall govern the drilling, completion and all other operations associated with such infill wells. Notwithstanding the current working interest ownership of the Turner "B" Waterflood Project and the Skelly Waterflood Unit as recited in paragraphs 1 and 2 above, the working interest of the parties under said operating agreement shall be:

The Wiser Oil Company	50.00%
Devon Energy Corporation (Nevada)	50.00%

The operating agreement and exhibits thereto shall become effective as of the effective date of this agreement and shall govern any operations not expressly covered by this agreement. In the event of a conflict between the terms of the Operating Agreement attached hereto as Exhibit "B" and the terms of this agreement, the terms of this agreement shall prevail.

Production attributable to the Devon operated infill wells as set forth on Exhibit "A" shall be commingled into an existing Turner "B" tank battery of Devon's choice. Production attributable to the Wiser operated infill wells as set forth on Exhibit "A" shall be commingled into an existing Skelly Waterflood tank battery of Wiser's choice. Wiser and Devon agree that production from such infill wells shall be allocated based upon monthly well tests. Well testing shall be accomplished utilitizing a test heater treater or test separator. Produced fluid from a well to be tested will be segregated from the field production and diverted to a test vessel where the separation of oil, gas and water will occur. Only one well shall be tested at a time. No other wells shall be allowed to produce into the test vessel when another well is being tested. Oil and water volumes exiting the vessel will be metered or sent to a test tank for direct measurement.

If metering oil volumes, meter accuracy should be at least $\pm 1.0\%$ with a repeatability of at least $\pm 0.05\%$. Oil meters should be calibrated on a quarterly basis with each party having the right, upon thirty (30) days written notice, to witness such oil meter calibrations. Any time the accuracy of a meter is in question either party with reasonable written notification may inspect the other party's oil meter at their own expense.

Gas volumes may be allocated based on the applicable Project or Unit GOR, or gas volumes may be measured using an orifice well tester connected to the gas outlet on the heater treater or test separator.

ARTICLE 8

COMPLIANCE WITH LAWS AND REGULATIONS

8.1 <u>Laws. Regulations and Orders</u>: This agreement shall be subject to and operations hereunder shall be conducted in compliance with the conservation laws of the State of New Mexico, the valid rules, regulations and orders of the New Mexico Oil Conservation Division and all other applicable federal, state and local laws, ordinances, rules, regulations and orders.

8.2 <u>Governing Law:</u> This agreement and all matters pertaining hereto, including, but not limited to, matters of performance, nonperformance, breach, remedies, procedures, rights, duties and interpretations or construction, shall be governed and determined by the law of the State of New Mexico.

ARTICLE 9

INDEMNITY

Each party hereto agrees to protect, defend, indemnify and hold harmless the other party from and against any claims, demands. causes of action, losses and/or liabilities of every kind and character arising out of, incident to, or in connection with such other party's water injection operations $p_{\rm eff}$ to the provisions of this agreement excepting, however, any claim, demand, cause of action, loss and/or liability which may result from the gross negligence or willful misconduct of such other party, its agents, officers, or employees. Such indemnity shall include, without limitation, reasonable attorney's fees, court costs and similar expenses. Each party hereby releases the other party from any liability for damages to the releasing party's interest in and to the releasing party's land described herein, arising out of, incident to, or in connection with the operations contemplated by this agreement, provided such operations are conducted in accordance with the terms and conditions of this agreement and such damage is not the result of gross negligence or willful misconduct of such other party.

ARTICLE 10

MISCELLANEOUS

10.1 <u>Entire Agreement</u>: This agreement embodies the entire agreement between the parties relating to the subject matter hereof and shall supersede all other agreements, assurances, conditions, covenants or terms relating hereto, whether written or verbal or antecedent or contemporaneous with the execution thereof. This agreement may be modified or amended only by an instrument in writing signed by both parties.

10.2 <u>Captions</u>: Captions have been inserted for reference purposes only and shall not define or limit the terms of this agreement.

10.3 <u>Binding Effect</u>: This agreement shall be binding upon and shall inure to the benefit of the parties hereto and to their respective successors, legal representatives and assigns.

WITNESS EXECUTION this 25th day of april 1997.

ATTEST:

By

THE WISER OIL COMPANY St-in-Fart

ATTEST:

STEVE CRONENEL ant Seconstan

DEVON ENERGY CORPORATION (NEVADA)

EXHIBIT "A"

Attached to and made a part of that certain Joint Operating Agreement dated January 1, 1997 by and between The Wiser Oil Contrany and Devon Energy Corporation (Nevada)

OPERATOR:

The Wiser Oil Company The Wiser Oil Company The Wiser Oil Company

Devon Energy Corporation (Nevada) Devon Energy Corporation (Nevada) Devon Energy Corporation (Nevada)

L CONTRACT AREA:

400 ____ \$ 402

TC. ADDRESSES FOR NOTICE PURPOSES:

The Wiser Oil Company	Devon Energy Corporation (Nevada)			
8115 Preston Road. Suite 400	20 North Broadway, Suite 1500			
Dallas, TX 75225	Oklahoma City, OK 73102			
Attn: Matt Eagleston	Attn: Steve Cromwell			
Project Manager	Land Manager			

PERCENTAGE WORKING INTERESTS OF THE PARTIES; n

Parties	Percentage Working Interest in Contract Area
The Wiser Oil Company	50.00%
Devon Energy Corporation (Nevada)	50.00%
Totals	100.00%

DESCRIPTION OF COMMITTED LEASEHOLD: IV.

Each of the Oit, Gas and Mineral Leases, or undivided interests therein, committed to this Agreement by the parties hereto and listed hereinafter are committed INSOFAR, AND ONLY INSOFAR, as each covers lands and depths within the Contract Area. All recording references are to the County Records of Eddy County, New Mexico.

Leases committed by The Wiser Oil Company (100%): A.

LESSOR	LESSEE	LEASE DATE	lessor roy.	OTHER BURDENS	REFERENCES BOOK PAGE
USA #LC-029420-B	Skelly (3) Company	4/30/38	eii0210000 gua 1250000	.0100000 ORRI	

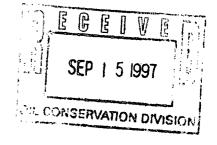
B Leases committed by Devon Energy Corporation (Nevada) (100%):

LESSOR	LESSEE	LEASE DATE	LESSOR ROY.	other Burdyns	RECORDING REFERENCES BOOK PAGE
USA #LC-025095-U	Danniger Oil & Retining Co.	4/1/46	oiil0210000 ges1250000	-0-	



20 North Broadway, Suite 1500 Oklahoma City, Oklahoma 73102-8260 Telephone: 405/235-3611 FAX 405/552-4550

September 10, 1997



State of New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505

Attention: Michael E. Stogner

Re: Unorthodox Locations Turner 'B' 134, 135, 136 Section 20-T17S-R31E Eddy County, New Mexico

Gentlemen:

Devon Energy Corporation (Nevada), as operator, has previously applied to the NMOCD by letter dated June 3, 1997 for administrative approval for the drilling of the referenced wells at unorthodox locations. During our voice mail telephone conversation of September 8, you advised that you were granting verbal approval of the referenced unorthodox locations and that the formal order(s) would be forthcoming.

Accordingly, based upon your verbal direction Devon will commence operations for the drilling, completion and production of said wells during the week of September 8.

Thank you for you cooperation.

.

Yours very truly,

DEVON ENERGY CORPORATION (NEVADA)

Ken Grav District Landman

KG:cj\NMOCD.lt1 الحبار المراجع الجناج ويوجع ويحجون الربي تستحر ووجحوا الجوالح المتحاد فالمحاد المواجع المتهجون ف cc: Randy Jackson na server en en transmissione en talena en subética de la servere en and the second secon