

NSL

August 21, 1997

ALIG 25 1997

Mr. William Lemay New Mexico OCD 2040 South Pacheco Santa Fe, New Mexico 87505

RE: Application for Administrative Approval to drill a Directional Well to an Unorthodox Bottom Hole Location State AZ # 3 well Unit M Section 16-17S-31E 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 10' FSL & 170' FWL, with the bottom hole location at 10' FSL & 10' FWL, both within Unit M of Section 16-17S-31E. It is necessary to directionally drill this well as the primary surface drill site is inaccessible due to power lines in the area

¥

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. This Unit Line Agreement is in the process of being revised to include this and other wells along Wiser and Devon's common lease line, and will be provided when complete. Being that Devon is the only offset Operator, no Affidavit of Mailing was prepared, however, Devon will be provided a copy of this letter and application.

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

and the second second second

and the grant water water and the second the state m Bunee in

. Real All Schutzer

 $(a, \bullet) = (a, b)$

completing the new aquement in This intil within on This with on This matter MS.

the process of

12-29-97

If you have nay questions, or need additional information, please feel free to give me a call at (505) 746-1070. Thank you for your attention to this matter.

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

Michael R. Burch, CPL

mrb/s enclosures/cc

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

Ms. Lauri Block The Wiser Oil Co. 8115 Preston Road Suite 400 Dallas, TX 75225 Mr. Matt Eagleston The Wiser Oil Co. 8115 Preston Road Suite 400 Dallas, TX 75225

Mr. Ken Gray Devon Energy Corp. 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., Azlec, NM 87410
District IV
P. O. Box 2088, Santa Fe, NM 87504-2088

-

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION P. O. Box 2088 Santa Fe, NM 87504-2088 Form C-101 Revised February 10, 1994 Instructions on back Submit to Appropriate District Office State Lease - 6 Copies Fee Lease - 5 Copies

AMENDED REPORT

APPLIC.	ATION	FOR PE	RMIT T	O DRI	LL, RE-EN	ITER, DEI	EPEN,	PLUG	BACK,	OR .	ADD A ZONE
	0.1.0		' Of	erator Nan	ne and Address.					2	OGRID Number
The Wise									Ļ		022922 ³ API Number
C/O J. O.			D (0001								API Number
P. O. Bo		Artesia, I	VM 8821	1-0245		·				,	
* Prope	rty Code					operty Name					⁶ Well No.
	12				St	ate AZ					5
						Location					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Li		from the	East/We		County
<u> </u>	16	17S	31E	l	10	South		170	We	st	Eddy
		0	Proposed	Botton	n Hole Loca	tion If Diffe	erent Fr	om Sur	face		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Li	ine Fee	from the	East/We		County
<u>M</u>	16	17S	31E		10	South		10	We		Eddy
G	auhura I	•	d Pool I -Rivers C	NCD	S A			·· Pro	posed Pool 2		
	ayoung J			·							· · · · · · · · · · · · · · · · · · ·
	Type Code		² Well Type C	ode		/Rotary	14 I	ease Type	Code	13 (Fround Level Elevation
	V		P		F	ζ		<u>S</u>			3746
¹⁶ Mi	ıltiple		¹⁷ Proposed De	pth	¹⁸ Formation	Grayburg-		¹⁹ Contracto	or i		²⁰ Spud Date
			4000'		San A	ndres	[ASAP
			21	Propos	sed Casing a	and Cement	Progra	m			
Hole si			g Size	Casin	g weight/foot	Setting D	epth	Sack	s of Cement		Estimated TOC
12 1/2	"	8 5/8	' J-55		23#	493	•	300	Class"C	"	circulate to surf.
7 7/8	**	<u> </u>	J-55		17#	5000)'	700	Halli. Lit	e	circulate to 100'
								650	Prem.Plu	IS	above 85/8"
											casing shoe
						give the data on th	ne present p	roductive z	one and prop	osed new	v productive zone.
Describe the bio	wout preven	uon program,	11 any. Use ad	iditional she	ets if necessary.				,		
Duananat						40001		. 16 .		-1	
-		-			tal depth of		-				
					ted as neces						
5	ox bottor	n hole lo	cation and	d theref	ore has been	n forwarded	to the	OCD in	Santa F	e for	administrative
approval.											•
Blow Out	Preventi	on: 10"	Series 900) Type '	"E" Shaffer	Hydraulic E	30P wil	l be use	d.		
				• -		-					
		ormation give	n above is true	and compl	ete to the best of	(NSER	ATION		ISION
my knowledge	and belief.	n - D	0	-							
Signature: W	behard	K.D.	meh			Approved by:					
Printed name: 1						Title:		•			
Title: Agent fo	r The Wiser (Oil Company				Approval Date:			Expirat	ion Dat	e:
Date: 8-21-97			Phone: 505-	746-1070		Conditions of A Attached	pproval:				······································
	······	······	L	·							

DISTRICT I 2.0. Bax 1980, Hobbs, NM 88241-1980

. •

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

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

ł

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

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

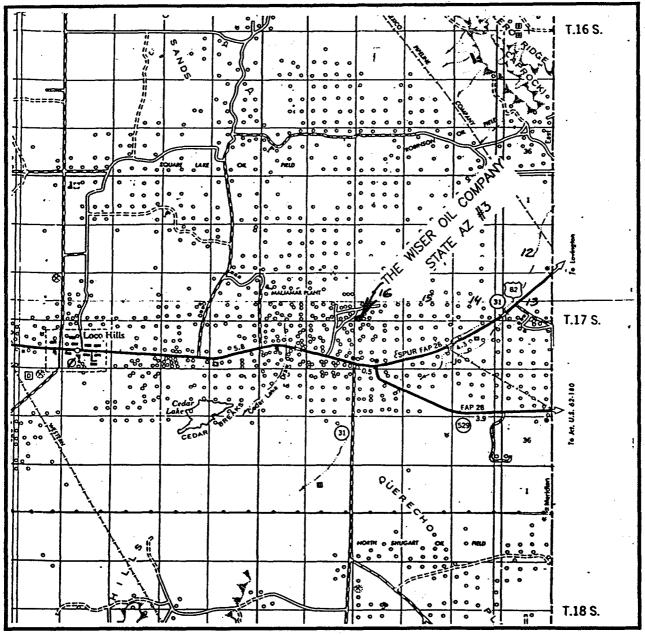
OIL CONSERVATION DIVISION P.O. Box 2088

Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

			WELL LO	CATION	AND ACREA	AGE DEDICATI	ON PLAT		
API	Number		1	Pool Code			Pool Name		
Property	Code		<u> </u>		Property Ner STATE AZ		<u> </u>	Well Num 3	iber
OGRID N	0.		<u> </u>	Operator Name			Elevation		
				THE	WISER OIL			3746	_
		.	·····		Surface Loc				· · · · · · · · · · · · · · · · · · ·
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
М	16	17 S	31 E		10	SOUTH	170	WEST	EDDY
	L	L	Bottom	Hole Lo	cation If Diffe	erent From Sur	face	•	
UL or lot No.	Section.	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Bast/West line	County
Dedicated Acre	- I Taint a	r Infill C	onsolidation (Code O	rder No.				
40	a some c				wer no.				
	WABLE W	TILL BE	SSIGNED 7	THIS	COMPLETION	UNTIL ALL INTER	ESTS HAVE BI	EEN CONSOLIDA	ATED
						APPROVED BY			
	T 						OPERATO	OR CERTIFICAT	TION
	1				1		l hereb	y certify the the inj	formation
	, 			{	1		11	n is true and compl pledge and belief.	ete to the
	i				1		Jest of my think	may's unit versaj.	
	İ				1		1- w	8-0-1	
	İ				r 		1 Micha	il K. Du	not
├	+			┠	_ i -		Signature		
	1				ĺ			ael R. Burch, C	
					1			for The Wise	
	1						Title Comp		
	1				1				
	1						Date		
l							SURVEYO	OR CERTIFICAT	NON
	1		OVERHEAD ELEC. LINE		i		I hereby certin	y that the well locati	ion shown
	l.	3739.0 🖞 _	3747.4'		t		actual surveys	as plotted from field made by me or	under my
	<u>{</u>	160'	⊃ LC	CATION	1			d that the same is a best of my believe	
					I				
	ې ۱	5737.9' 🛱 🗂		.	1		AUGU		
hbrin		·		L			_ Date Survey	Seel of Down	JLP
	v → v L						Professional	Surveyor.	
1	ŕ				r L				
	r T				1		B. ann IX	Bulnorte	.11-97
	j				, I		7 W.O. N	m. 97-11-13	347
170	4				• •		Certificate N	o	T. 678
0.	4				1			OFE SCHALL S. EIDSO	N, 3239 N, 12641
	VA A AL			L			``	UNICOUNT G. LIDSU	12041

VICINITY MAP



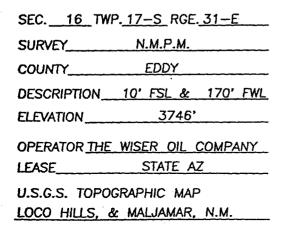
SCALE: 1'' = 2 MILES

SEC. <u>16</u> TWP.<u>17–S</u> RGE.<u>31–E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>EDDY</u> DESCRIPTION <u>10' FSL & 170' FWL</u> ELEVATION <u>3746'</u> OPERATOR <u>THE WISER OIL COMPANY</u> LEASE <u>STATE AZ</u>

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



SCALE: $1^* = 2000'$



CONTOUR INTERVAL - 10'

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

	₩ p, 7 ⁴ 063064 4.3 9.3	111 25 44 L6 3374 111 25 44 L6 3374 111 3547-794-R 44-C 50	Ub 3368 110763 PT 1 Votes Pet 1056302 2 3 4 1 Tex. Tr. Ushnasar Tex. Tr. Newmont Newmann 5 5 16 Newmann 6 5 16 Newmann 6	Serv. Driftster october 356302	Gen. New Mex. Incl
110 151 16 100 5 - 9	With the build and state	(Sp. Pet. Expl.) Anodorko	VewmontNewment); 15 Newment)	Carper Kennede Amennede Kennede Newmann (Newmann Victor Fr.	Ken 054302 Corpor Johnson' Johnson (Cit. 0) 35 302 2.C
1.60) (733)	Anorportes Cit. Set Objeto 10 10 10 10 10 10 10 10 10 10 10 10 10	Applet State Anodorke	956302 ivates Peti vates Petivates Pet Vates Peti O68368	More cool D29433 More co O65561 O66302 (Cities O56302 (Cities Serv. DR	(Exxon : A Gen. New Mer Servi) D/R] 10 350 letals Anodork
2 10' Tite 10 11 11 20010	S distance i a serv.	TD PERSON PILL PROVIDENT DEV	Kennedy Tex. Tr." Plasses	forperjohnson forpe	96 1029439 U.S. D/R) 1029438 Ken Johnson
	3/17 dl 25 99 3/38.97 2/39.96 / ∮1 9 ³⁵ 92 Socorro Pet. 935	39.96 413895 3139.95 2199.94 1 44 Socorrofet. 9108	SocorroPet. SocorroPet.	10 WEST O AISIWI SOCOTO Per. 15	39.90 139.90 5 3 39 90 21 99 90 F Beoletol 1 IMack Beoletol 1 Ener.
Atlica 2 Chem DA	JI 27 51	37 (Sinclair) 45 P113 36 8 8 9 225435	(Sinclair) (Sinclair) #6 ^{*8} •5 #44-1-73#6	1 16 €(wo) 16 ¹ 4	■3 : aL. ●4,
132.WIU	3/37 Z ¹ 6 -€25 €42 € ²¹ 8 ³⁸	5 19 14	029426 4 029426 24 07 # 11 1 # ⁵ # 9	• 33 23 055 37 26 • 32 055 • 37 26 • 9326 Socorro Per.	1 Mack Arwood os 2 Mack Arwood os
28G-SA))PER.)	UNIT 31.47 71 *Keel" 20	n1314	Disc. 22 7/5 7005 9 27 1 14 17	P326 Socorrorer. 056 B 25 16 44 029426 B 25 "H.E.West" WI	I IERCE I INDUCE
• 70 • 19 (D.D)	•16 U.S. •30 (D.D) 3(57)	• 35 U.S. Keel	U.S. Weat 23 64 28 WI	0.50 0.57 0.65	Tidewoter State Wilson Livew Mex.S
Burnett Oil	j ¹⁴ • • j ¹³ i ¹ Socorro Pet.	• 18 g7 g 18 'g' Socorro Per. (Sinclair) /	● 29 47 ((9) Socorro Ast TD 3 550	40 (19 1 24 Socorroner, Viking (0.0.) 52 SitSinchorr Angered. 984 029426 58	(DD) (DD) (C) (C)
055264 47 48	3/ ca 71 (Sinclair) 15 16 029435 15 16 029435 15 16 029435	929435 gr17 ● 6 "B" ∮8 ● 15		¹³ ¹³ ¹⁵ ¹⁵ ¹⁵ ¹⁵ ⁴² ⁴² ⁴²	0254119 ● ¹⁰ ● ⁷ ● ⁶ ● ¹⁵
osh, Windfohr 2 Brown 36 7	3, 74 3 ¹ 7 4 (60)	8 ● ⁵ → ²⁹ ●27 → ²⁸ TD 3700 T03800	35 0.30-W1 46 1, TD 3952	an 14 - 34	• ¹¹ • ⁸ • ⁴ • ¹⁴
023334 lied Chem.) D/R 35	31 89 7 (WO) X 6 8 6	² (DD) ⁴ (,5, 1,50) ⁴⁶ PH6	"H.E.West" 43 45 1217 (22)	21 44 10 Toserz 31 (0) "H.E.West" (10)	• ¹² • ³ • ⁵ • ¹³
Jockson fobr 6 30	3' 9 Socorro Pet. HowWestall	Keel	U.S. 195757 P	U.S	U.S.
101 0.45-WI 0.29 0.29 0.39 0.29	629669 (Wa) (054508) 629669 Fairoit	5 04998 [Restor 5 04998 [Restor] 5 04998 [Restor] 5 04998 [Restor]	B-3105 0. Randle 0.	100 Texaco P24	(DD)(WO) TETOLD
20 27 28 28 28	• Russell 10 "Hudson"	05490 10 3 81 Fed. 3 5 Hudsorwill .	0. Randie - B. St	17 19 20 21 500 Res 753 154 150 155 151 152 24 227 26 25	
ta e ³ e ¹⁶ 552 Sinclair Turner	57.20 31 2 30 3 Socorro Pet. 13 10 10 10 10 34 34 33 34 34 34 34 34 34 34	5 6, Cieluut 6 0576 23 1 241 10777 5 0576 23 1 241 107777 5 0576 23 1 241 107777 5 0576 24 107777 5 1077777 5 1077777 5 1077777 5 1077777 5 1077777 5 1077777 5 1077777 5 1077777 5 107777 5 1077777 5 107777 5 107777 5 107777 5 107777 5 1077777 5 10777777 5 10777777 5 1077777 5 1077777 5 1077777 5 1077777 5 1077777 5 1077777 5 10777777 5 10777777 5 10777777 5 10777777 5 10777777 5 1077777777 5 10777777 5 10777777 5 107777777 5 1077777777 5 10777777777777777777777777777777777777	1-3014 014 0-8 2:4 0-7253	31 ⁵² 26 25	24 23 Texaco 22 A4 A4
TD 9800 DM 7-11-68	32.31 71 (Sincleir) 029395 A B C C C C C C C C C C C C C C C C C C			5.5 Mil. 1 30 31 32 125 ₩ U.S. 31 52 125 10.00 127	129418 129418 33 120 129418 140 140 140 140 140 140 140 140
4 3 029335	1 3' y 21 € 26 Sinctoir Turner Turner 3: 4' 5 Socorro 5: 5 Socorro 1: 12 State 12 5: 5 Socorro 1: 12 State 23 5: 5 Socorro	3 Le Secorro Pet.		* ³ ² 43 ⁴² ¹²⁸ ⁴	4° 37 -28
hr & Brown ied Chem. D/R	•:::: pet."A" 2:333 Sunctoir •::: •:::::::::::::::::::::::::::::::	42 (3 Vinction - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Terror to Ulis	V Texaco	119 47 48 49 Am
N ^P Burnett	≠18 +19 +21 +26 77 + 21 + 26 37 €1,21 + 27 + 27 + 27 + 27 + 27 + 27 + 27 +	23 99 A 20 70 70 51	21 Dual 4	22 156 0001	"Leo Stote" • #3
011 12 23-8 (<u>8-3627</u>) (Penroč Somedon	5.5.2 Sin2) Second (19.24)	12 11 11 11 11 11 11 11 11 11 11 11 11 1	• 63 • 13 • 12 • 68 • 67 DD; • DD; • 9D;		0 ⁷³ 72 Getty 71 Maz 4- Shelly UT -8* TD3872 129418
28-8 25 P	A STATE AND A STAT	Anonas 21 24 Alas (Sinchar) 4 Avonas 21 24 Alas (Sinchar) 44 125 21 Alas 77 45 Turner - 45	15 15 U.S. (Ma) 76 74 Day: 025 01	55 73 (007) 56 57 772 6 145 57 772 (00) 14757 (00)	•121 •79 •40 • 81 *(Leo State* 155 (DD) (D.D.)
, etal) 350 11 10 3365	37 4/ 5 3 1 (Sinclar) 3x 1 Socorro 2	75 45 46 23 67 51 14 53 77 13 67 57 51 14 53 70 703000 70 70 70 70 70 70 70 70 70 70 70 70	91 90 90 89 130 80	87 (0.0) 	
0 10	Mag/rvest	51 54 619395 45 55	155 92 55 9420 55	107 8	Gerty 4.0 • 0 Tot • 3.0
SON UNIT	31 31 2 3 ARCO Friess 2MA 33 82 3 Avon Enerist 53	10,11,14.50 979 60 60 ⁸¹ 29 682 14 60 51 62	100 J55 28	$\begin{array}{c} 1_{134} 1_{10} (0, \mathbf{D}) 1_{135} (1_{11}, 3_{12}) \\ 2_{11} 2_{11} 2_{11} 2_{11} \\ 1_{10} 1_{10} (1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} 1_{10} (1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}, 1_{10}) \\ 1_{10} (1_{10}, 1_{10}) \\ 1_{10} (1$	Getty 26
kson Chem	(Sinclair) W 0 029395	98 86 87 88			-529-
Enron	ATOKO DISC. U.S. 103597	11 56 U.S. 63 ANOTO 58 Brown etol. Turner Tostie	U.S. Dow	US.	U.S. Maralo, Inc. Maralo
Colessa Not	Z Stogner TO 3527 M*Cigilan D/A 9-28-48 cu /f	(H.E. Yotes) Tomoracky (H.E. Yotes) Tomoracky LH-1832 Simon et al	o ²⁸ Te×oco	(Marolo,inc) [50] 33 070003 115 92	H8P 970009 41 070009 8.6.White-
Гехасо н 9 Р 8 - 5 6 5	33.3% 7 Yates Pot, stal Premier 82901 52 55	T03815-4 41	029420 "Dow-Fed." Texaco Dow Fed. POWER 33 Morribus.	West'n 0il <i>Federol</i> TO 6440 1 → 1 D/A 5·3/50	Yates head Pet Sounders- HBP Fed Fed
	33 41 37 31 (Anoderko) English & Hormon 2016 2277 1 4 Stegner 175 29 1 10 1252	H.E. Yates Power Deep-St. 32 18:3627 (1 H.E. Yates (1 H.E. Yates	GRAYBURG	S/2 HBC SUNTOY M.C Pet Foster T0.4516 17595	17595 35 PAG-21-57
	33.53 7 (Meridian)	Control V-9018 TD4059 137 98	LEASTLAND OIL		W.A.E.E.R. Hudson Lowe-Fed.
	Allied Fed. HBP Unit Tex. Allied Fed. 0334702	Allied-51 §1 State 54.971 (139.96.9/3) 40.91 21.0.93 // (During With- (During With- (During With-	40.04 , d ¹ 40.04 3140.04 2140.04 1	Marrow 18 "Mesquine 34" 2' \$ 19.82 U.S 10.05 4 40 55 3 40.11 2' 40.12	U.S. 54 61666
011)	2. Eastland 11 22 Union 1011	Gran Disc Arignitic	40 04 4140.04 3140 04 21 40.04 1 Anodarko 1 H.E. Yates	40.05 410 CO 3 40.11 2 40.12 4	Amocoj 4-40.14 2-40.12 Amocoj 4-MC

DIRECTIONAL WELL PROPOSAL

THE WISER OIL COMPANY STATE AZ WELL #3

SEC. 16, T-17-S, R-31-E EDDY COUNTY, NEW MEXICO

PREPARED FOR: MR. MATT EAGLESTON

PREPARED BY: RICK EATON DIRECTIONAL COORDINATOR

AUGUST 17, 1997



The Future Is Working Together.

9270



HALLIBURTON ENERGY SERVICES

2822 1-20 West / Odessa, Texas 79763 / Tel: 915-560-0014

August 27, 1997

THE WISER OIL COMPANY

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

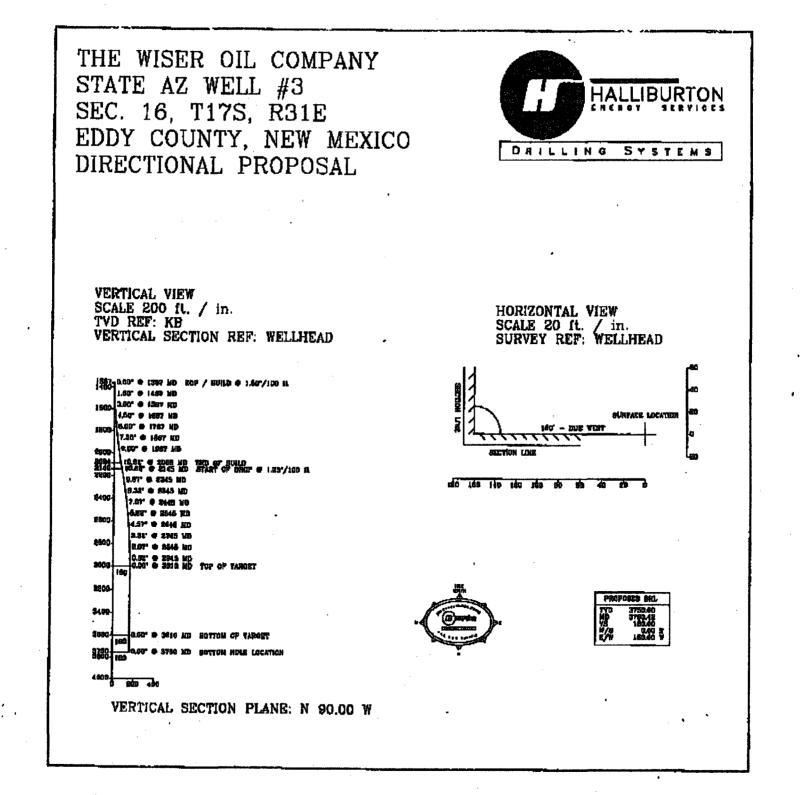
Dear Matt,

We appreciate the opportunity to present the following Directional Well Plan and Cost Estimate for the State AZ Well #3 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,

Rick Eaton



AUG.18.1997 12:27A

NO.179 P.

1

HALLIBURTON DRILLING SYSTEMS

Date: 8/17/97

Page 1

Proposal Report

Time: 5:45 pm Wellpath ID: DIRECTIONAL WELLPLAN Last Revision: 8/17/97

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

Measured Depth				DLS	Vertical Section			
(ft)	(deg.)	(deg.)	(ft)	(ft)	(ft) (ft)		(dg/100ft)	(ft)
KOP / BUIL	D@1.5	0 deg/100 ft						
1367.00	0.00	N 0.00 E	0.00	1367.00	0.00 N	0.00 E	0.00	0.00
1467.00	1.50	N 90.00 W	100.00	1466.99	0.00 S	1.31W	1.50	1.31
1667.00	3.00	N 90.00 W	100.00	1566.91	0.00 \$	5.23W	1.50	5.23
1667.00	4.50	N 90.00 W	100.00	1666.69	0.00 S	11.77W	1.50	11.77
1767.00	6.00	N 90.00 W	100.00	1766.27	0.00 S	20.92W	1.50	20.92
1867.00	7.50	N 90.00 W	100.00	1865.57	0.00 S	32.68W	1.50	32.68
1967.00	9.00	N 90.00 W	100.00	1964.54	0.00 S	47.03W	1.50	47-03
2067.00	10.50	W 90.00 W	100.00	2063.09	0.00 8	63.96W	1.50	63.96
end of Bu	JILD							
2088.27	10.82	N 90.00 W	21.27	2083.99	0.00 S	67.90W	1.50	67.90
START OF	CURVE	@ 1.25 deg/	100 ft					•
2144.90	10.82	N 90.00 W	56.63	2139.61	0.00 S	78.53W	0.00	78.53
2244.90	9.57	N 90.00 W	100.00	2238.63	0.00 \$	96.22W	1.25	96.22
2344.90	8,32	N 90.00 W	100.00	2336.82	0.00 8	111.77W	1.25	111.77
2444.90	7.07	N 90.00 W	100.00	2435.91	0.00 S	125.16W	1.25	125.16
2544.90	5.82	N 90.00 W	100.00	2535.28	0.00 S	136.38W	1.25	136.38
2644.90	4.57	N 90.00 W	100.00	2534.87	0.00 S	145.43W	1.25	145.43
2744.90	3.32	W 90.00 W	100.00	2734.63	0.00 S	152.31W	1,25	152.31
2844.90	2.07	N 90.00 W	100.00	2834.52	0.00 \$	157.01W	1.25	157.01
2944.9 0	0.82	N 90.00 W	100.00	2934.48	0.00 8	159.53W	1.25	159.53
TOP OF TA	RGET							
3010,42	0.00	N 0.00 E	65.52	3000.03	0.00 S	160.00W	1.25	160.00
BOTTOM O		ET						
3610.42	0.00	N D.00 E	600.00	3600.00	0.00 S	160.00W	D.00	160.00
SOTTOM H								
3760.42	0.00	N 0.00 E	150.00	3750.00	0.00 S	1 60.00W	0.00	160.00

COOPERATIVE UNIT LINE INJECTION WELL

SKELLY WATERFLOOD UNIT TURNER "B" WATERFLOOD PROJECT

THIS AGRERMENT 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, atl 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 ito 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 reactivate existing shat-in injection wells as follows:

Skelly Unit #52 Located in NW/4 NW/4 of Section 21-T17S-R31E Skelly Unit #52 Located in SW/4 NW/4 of Section 21-T17S-R31E Skelly Unit #59 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 #74 Located in SW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #74 Located in SW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #74 Located in SW/4 NW/4 of Section 28-T17N-R31E Skelly Unit #74 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 NE/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 bydrocarbons 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 bereto 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 Sumply</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 <u>Injection</u>: Except as otherwise provided in Article 1.4 herein ("Replacement and 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 tower 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 cutualative 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 Areas 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 reader 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 asspended 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 majeure 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	De
8115 Preston Road, Suite 400	20
Dallas, TX 75225	Ok
Atta: Matt Eagleston	Att
Project Manager	

Devon Energy Corporation (Nevada) 20 North Broadway, Suite 1500 Didahoma 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 uporthodox 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 provail.

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 Laws. Regulations and Orders: 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 bereto, 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 μ_{max} 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 denil ____, 1997.

ATTEST:

THE WISER OIL COMPANY

By:

ATTEST:

By: At STEVE CRONVEL signt Secrecary

DEVON ENERGY CORPORATION (NEVADA)

EXHIBIT "A"

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

L	CONTRACT AREA:	OPERATOR:	
# 400	• Shelly land Well #258, 10 FSL and 10 FW	Section 21-T17S-R31E The West Oil Comment	
	Shelly Unit Well #271, 1300' FNL and 10' F	WL, Soction 28-T17S-R31E The Wiser Oil Company	
\$ 401 -	 Skelly Unit Well #282, 2625' FNL and 10' P Skelly Unit Well #282, 2625' FNL and 10' P 	WL Section 28-T17S-R31E The Wiser Oil Company	
8402	Torner B-134, 13507 PNL and 10 FEL, Sect		
9 - U.S	Turner B-135, 2625' FNL and 10' FEL, Sect		
	Turner B-136, 3900 FNL and 10 FEL, Sect		
IĽ.	ADDRESSES FOR NOTICE PURPOSES:		
	The Wiser Oil Company	Devan Euergy Connoration (Nevada)	
	8115 Preston Road, Suite 400	20 North Broadway, Snite 1500	
	Dallas, TX 75225	Oklahoma City, OK 73102	
	Attn: Matt Eagleston	Attn: Steve Cromwell	
	Project Manager	Land Manager	
ID.	PERCENTAGE WORKING INTERESTS	P THE PARTIES:	
		Percentage	
		Working Interest	
	Partles	in Contract Area	
	The Wiser Oil Company	50.00%	
	Devon Energy Corporation (Nevada)	50.00%	
	Totais	100.00%	
IV.	DESCRIPTION OF COMMITTED LEASE	HOLD:	
	Each of the Oil, Gas and Mineral Leases, or hercinalter are commuted INSOFAR, AND recording references are to the County Record	undivided interests therein, committed to this Agroement by the p ONLY INSOFAR, as each covers lands and depths within this of Eddy County, New Mexico.	azties h w Cont

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

recordi

LESSOR.	LESSE	LEASE DATE	LEBOOR ROY.	othea Burdens	REFERENCIAS BOOK PAGE
USA #LC-429420-B	Sizily OB Company	4/30/38	ali92.18080 gu1258068	.0100500 ORRI	

neto and listed act Area, All

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

LESSOR	LISSEE	LEASE DATE	LESSOR ROY.	other Blrivns	RECORDING REFERENCES BOOK PAGE
USA #10-023095-15	Duraigur Oil & Retining Co.	41/46	oli0210000 mm-, 1250000		





119 South Roselawn, Suite 302 Artesia, New Mexico 88210

September 4, 1997

Mr. William Lemay New Mexico OCD 2040 South Pacheco Santa Fe, New Mexico 87505



RE: Application for Administrative Approval to drill Directional Well to an Unorthodox Bottom Hole Location State "AZ" # 3 well Unit M Section 16-17S-31E Eddy County, New Mexico

Dear Mr. Lemay:

Pursuant to my letter dated August 21, 1997 seeking approval for the above noted well, please find following items:

- (1) <u>Affidavit of Mailing</u> to offset Operators, which was inadvertently left out of our original application.
- (2) <u>Horizontal & Vertical Plan View</u> for subject well, which is of better quality than previously submitted copy.

Upon review, should you have any questions or need any additional information, please feel free to give me a call. Thank you for your attention to this matter.

Sincerely, J. O. Easley, Inc.

Michael R. Burch, CPL

mrb/s enclosures Telephone (505) 746-1070 Fax (505) 746-1073

AFFIDAVIT OF MAILING

Application for Administrative Approval to drill a Directional Well to an Unorthodox Bottom Hole Location **State "AZ" # 3 well** Surface Location: 10' FSL & 170' FWL Bottom Hole Location: 10' FSL & 10' FWL Unit M (SW/4SW/4) Section 16-17S-31E Eddy County, New Mexico

STATE OF NEW MEXICO } } SS. COUNTY OF EDDY }

I, Michael R. Burch, do solemnly swear that a copy of this Application has been mailed by certified mail, to each of the following offset Operators:

Kersey & Company P. O. Box 1248 Fredericksburg, Texas 78624 Trinity University & Closuit P. O. Box 6-A Loco Hills, New Mexico 88255

Michael R. Burch, CPL Consulting Landman with J. O. Easley, Inc. on behalf of The Wiser Oil Company

SWORN AND SUBSCRIBED TO before me this 4^{th} day of September, 1997.

My Commission Expires: Cieron 22, 1997 Notary Fublic

THE WISER OIL COMPANY STATE AZ WELL #3 SEC. 16, T17S, R31E EDDY COUNTY, NEW MEXICO DIRECTIONAL PROPOSAL

VERTICAL VIEW SCALE 200 ft. / in. TVD REF: KB VERTICAL SECTION REF: WELLHEAD

1367 0.00" @ 1367 MD ' KOP / BUILD @ 1.50*/100 ft 1600 1667 MD 6.00° @ 1767 MD 1800-7.50" @ 1867 MD 9.00" @ 1967 MD 2000-2084 10.82* @ 2088 MD END OF BUILD 10.82* @ 2145 MD START OF DROP @ 1.25*/100 (L 2140 2200-9.57" @ 2245 MD 8.32" @ 2345 MD 2400-7.07" @ 2445 ND 5.82" @ 2545 MD 2600-4.57° @ 2645 ND 3.32" @ 2745 ND 2800-2.07* @ 2845 MD 0.82" @ 2945 ND 0.00" @ 3010 ND TOP OF TARGET 3000 160 3200 3400-3600-0.00" @ 3610 MD BOTTOM OF TARGET 160 3750 0.00" @ 3760 MD BOTTOM HOLE LOCATION 4000

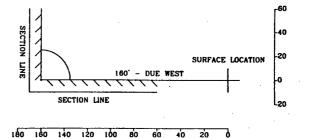
200 400

HORIZONTAL VIEW SCALE 20 ft. / in. SURVEY REF: WELLHEAD

HALLIBURTON

ENERGY

DRILLING SYSTEMS





PROPOSED BHL TVD MD VS N/S E/W 3750.00 3760.42 160.00 0 00 160.00

VERTICAL SECTION PLANE: N 90.00 W

HALLIBURTON DRILLING SYSTEMS

Page 1

Proposal Report

Date: 8/25/97 Time: 1:58 pm Wellpath ID: DIRECTIONAL WELLPLAN Last Revision: 8/22/97

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 STATE AZ WELL #3 SEC. 16, T17S, R31E EDDY COUNTY, NEW MEXICO DIRECTIONAL WELLPLAN

Measured Depth	Incl	Incl Drift Course TVD TOTAL Dir. Length Rectangular Offsets			DLS	Vertical Section		
(ft)	(deg.)	(deg.)	(ft)	(ft)	(ft)	(ft)	(dg/100ft)	(ft)
KOP / BUIL	D@1.5	0 deg/100 ft						
1367.00	0.00	N 0.00 E	0.00	1367.00	0.00 N	0.00 E	0.00	0.00
1467.00	1.50	N 90.00 W	100.00	1466.99	0.00 S	1.31W	1.50	1.31
1567.00	3.00	N 90.00 W	100.00	1566.91	0.00 S	5.23W	1.50	5.23
1667.00	4.50	N 90.00 W	100.00	1666.69	0.00 S	11.77W	1.50	11.77
1767.00	6.00	N 90.00 W	100.00	1766.27	0.00 S	20.92W	1.50	20.92
1867.00	7.50	N 90.00 W	100.00	1865.57	0.00 S	32.68W	1.50	32.68
1967.00	9.00	N 90.00 W	100.00	1964.54	0.00 S	47.03W	1.50	47.03
2067.00	10.50	N 90.00 W	100.00	2063.09	0.00 S	63.96W	1.50	63.96
END OF BU	IILD							,
2088.27	10.82	N 90.00 W	21.27	2083.99	0.00 S	67.90W	1.50	67.90
START OF	CURVE	@ 1.25 deg/	100 ft					
2144.90	10.82	N 90.00 W	56.63	2139.61	0.00 S	78.53W	0.00	78.53
2244.90	9.57	N 90.00 W	100.00	2238.03	0.00 S	96.22W	1.25	96.22
2344.90	8.32	N 90.00 W	100.00	2336.82	0.00 S	111.77W	1.25	111.77
2444.90	7.07	N 90.00 W	100.00	2435.91	0.00 S	125.16W	1.25	125.16
2544.90	5.82	N 90.00 W	100.00	2535.28	0.00 S	136.38W	1.25	136.38
2644.90	4.57	N 90.00 W	100.00	2634.87	0.00 S	145.43W	1.25	145.43
2744.90	3.32	N 90.00 W	100.00	2734.63	0.00 S	152.31W	1.25	152.31
2844.90	2.07	N 90.00 W	100.00	2834.52	0.00 S	157.01W	1.25	157.01
2944.90	0.82	N 90.00 W	100.00	2934.48	0.00 S	159.53W	1.25	159.53
TOP OF TA	RGET				•			
3010.42 BOTTOM O	0.00 F TARG	N 0.00 E	65.52	3000.00	0.00 S	160.00W	1.25	160.00

HALLIBURTON DRILLING SYSTEMS Page 2 Date: 8/25/97 Date: 8/25/97 Proposal Report Wellpath ID: DIRECTIONAL WELLPLAN

	alang na sa	Drift	Course	TVD	то	TAL	DLS	Vertical
Measured Depth (ft)	Incl (deg.)	Dir.	Length	(ft)	Rectangular (ft)	Offsets (ft)	(dg/100ft)	Section (ft)
3610.42	0.00	N 0.00 E	600.00	3600.00	0.00 S	160.00W	0.00	160.00
BOTTOM H 3760.42	OLE LOC 0.00	CATION N 0.00 E	150.00	3750.00	0.00 S	160.00W	0.00	160.00