G/-20/2	47 SUSPENS	ISE ENGINEER	G/J J	PMX TYPE	PMAM1726359182
zl ^{o``\}	I	- Eng	ABOVE THIS LINE FOR DIVISION USE ONL L CONSERVATION I gineering Bureau - ancis Drive, Santa Fe, NM	DIVISION	
		ADMINISTRA	FIVE APPLICAT	ON CHECKL	.IST
	CHECKLIST IS M/		IISTRATIVE APPLICATIONS FOR E PROCESSING AT THE DIVISION		N RULES AND REGULATIONS
	[DHC-Dowr [PC-Po	ndard Location] [NSP nhole Commingling]	Disposal] [IPI-Injection		se Commingling] easurement] nsion]]
[1] 1	YPE OF AP [A]		Those Which Apply for [Jnit - Simultaneous Dedica P] SD	ation $-Occi$	y dentelPermia 57984
	Check [B]	Cone Only for [B] or [C Commingling - Stora DHC CT	age - Measurement	🗌 ols 🗌 ol	M - North Ha
	[C]	Injection - Disposal -	- Pressure Increase - Enhar X SWD IPI	iced Oil Recovery	C-15A4mit# PR 30-015-3601
	[D]	Other: Specify Addit	tional Injector within approved	l project area (R-6199-	F) - North Hob Apply GISA Guita
[2] N	OTIFICATI [A]		: - Check Those Which Ap ty or Overriding Royalty I		Apply G-15#4mit# 30-025-07
	[B]	Offset Operators	s, Leaseholders or Surface	Owner	- Nonth Hol
	[C]	Application is C	One Which Requires Publis	shed Legal Notice	Gls A ynit
	[D]	Notification and U.S. Bureau of Land Mar	I/or Concurrent Approval I nagement - Commissioner of Public Land	by BLM or SLO	-North Hold GISA 4mit 30-025-359
	[E]	For all of the ab	ove, Proof of Notification	or Publication is Att	ached, and/or,
	[F]	Waivers are Atta	ached		- Hubbs', Grayb.
	UBMIT ACC F APPLICA	CURATE AND COM ATION INDICATED	IPLETE INFORMATIO ABOVE.	N REQUIRED TO	PROCESS THE TYPE S
[3] S					

Note: Statement must be completed by an individual/with managerial and/or supervisory capacity.

	On: All		
	aprilloc	Regulatory Specialist	09/18/17
ame	Signature	Title	Date

April Hood Print or Type Na

Ig

___April_Hood@Oxy.com___ e-mail Address

- - . .



Occidental Permian LTD. A subsidiary of Occidental Petroleum Corporation 5 Greenway Plaza, Suite 110, Houston, Texas 77046-0521 P.O. Box 27570, Houston, Texas 77227-7570 Phone 713.215.7000

1011 SEP 20 A 10:

RECEIVED

September 18, 2017

State of New Mexico Energy, Minerals & Natural Resources Department Oil Conservation Division 1220 S. St. Frances Dr. Santa Fe, NM 87505

RE: Pressure Maintenance Project North Hobbs Unit Well No. 944 API 30-025-35999 Letter I, Section 29, T-18S, R-38E Lea County, NM

To Mr. Richard Ezeanyim, Chief Engineer:

Occidental Permian Ltd. respectfully request administrative approval, without hearing, to commence injection (water, CO2, and produced gas) per the authorized Order No. R-6199-F. In support of this request please find the following documentation:

- Administrative Application Checklist
- Form C-108 with miscellaneous data attached
- An Injection Well Data Sheet with Wellbore Schematic
- Form C-102
- Map

*** Per Order No. R-6199-F, this application is eligible for administrative approval without notice or

hearing ***

If you have any questions regarding this application, please contact me at 713-366-5771 or email april_hood@oxy.com.

Sincerely

April Hood Regulatory Specialist

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

Ň

	Such Berninger Sunta Ferrer States 5755
	APPLICATION FOR AUTHORIZATION TO INJECT
I.	PURPOSE:Secondary Recovery X Pressure MaintenanceDisposalStorage Application qualifies for administrative approval? X YesNo
П.	OPERATOR: Occidental Permian LTD.
	ADDRESS: PO Box 4294 Houston, TX 77210
	CONTACT PARTY: April Hood PHONE: 713-366-5771
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	is this an expansion of an existing project? X Yes No If yes, give the Division order number authorizing the project: R-6199-F (May 22, 2014)
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such lata shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
*VIII.	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any njection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
XШ.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and elief.

E-MAIL ADDRESS: _____April_Hood@Oxy.com

SIGNATURE:

_____DATE: ____09/18/17

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: <u>Case No. 15103 Order R6199-F - Effective May 22, 2014</u>

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Side 2

III. WELL DATA

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

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

XIV. PROOF OF NOTICE

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

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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

INJECTION	WELL	DATA	SHEET
------------------	------	------	-------

OPERATOR:	Occidental Permian LTD.

WELL NAME & NUMBER: _________ North Hobbs Unit 20-111

WELL LOCATION:	330 FNL & 330 FWL		D	20	18-S	38-E
```	FOOTAGE LOCATION	UN	VIT LETTER	SECTION	TOWNSHIP	RANGE
<u>WELL</u>	BORE SCHEMATIC			WELL CONSTRUCTION DATA Surface Casing		<ul> <li>see additional</li> <li>production casing and production liner</li> <li>information on well</li> </ul>
			Hole Size: 16"		Casing Size: 12"	bore diagram
			Cemented with: <u>500</u>	sx.	or	ft ³
· · · ·		_	Top of Cement: 1355		Method Determined:	
• •				Intermediat	te Casing	
			Hole Size: <u>11 3/4"</u>		Casing Size: <u>9</u> "	
			Cemented with:	SX.	0r	ft ³
			Top of Cement: 1355'		Method Determined:	Calculation
				Production	n Casing	
			Hole Size:8 3/4"		Casing Size: 7 ^{<u>m</u>}	
• • • •			Cemented with: 200	SX.	or	ft ³
			Top of Cement:		Method Determined:	Calculation
			Total Depth: _4365'			· •
				Injection 1	Interval	
	• •	-	4181'	feet	to 4217' Perforate	d
·	· · · · · · · · · · · · · · · · · · · ·	Ann	(Perf	orated or Open H	ole; indicate which)	

.

# **INJECTION WELL DATA SHEET**

Tub	bing Size: 2 3/8" Lining Material:
Тур	De of Packer:
Pac	ker Setting Depth:
Oth	er Type of Tubing/Casing Seal (if applicable):
	Additional Data
1.	Is this a new well drilled for injection?YesNo
	If no, for what purpose was the well originally drilled? Producer
2.	Name of the Injection Formation: <u>San Andres</u>
3.	Name of Field or Pool (if applicable):
4.	Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.
	Squeezed with cement - 4181' - 4345'; Plugged back: 4242'-4270'
5	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
	Byers (Queen) @ +/- 3680
	Glorieta @ +/- 5300

, i

· <

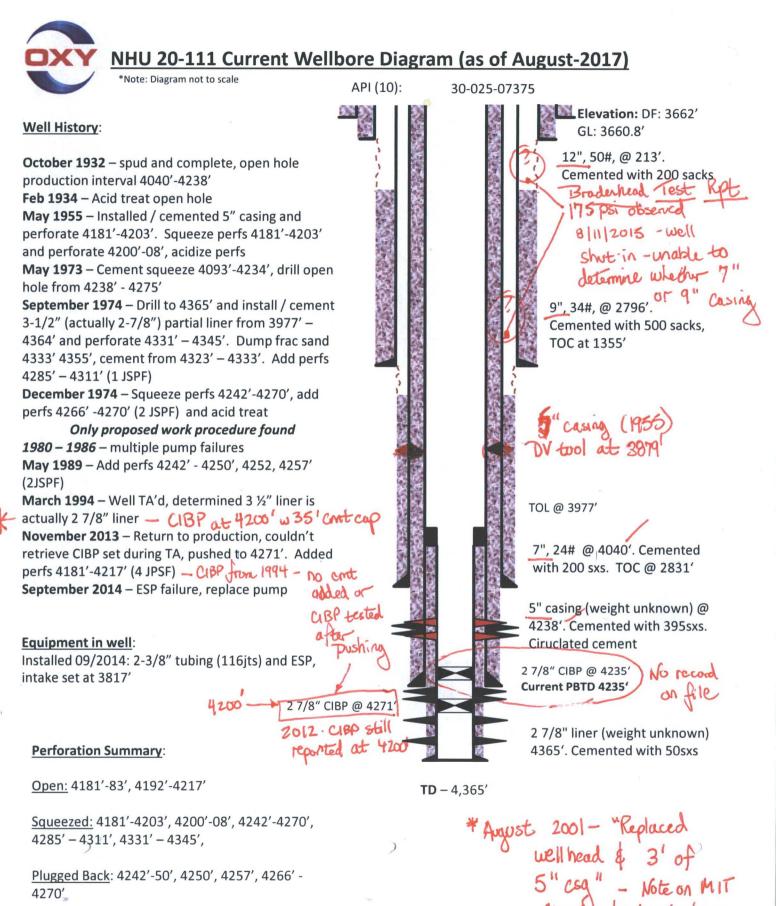


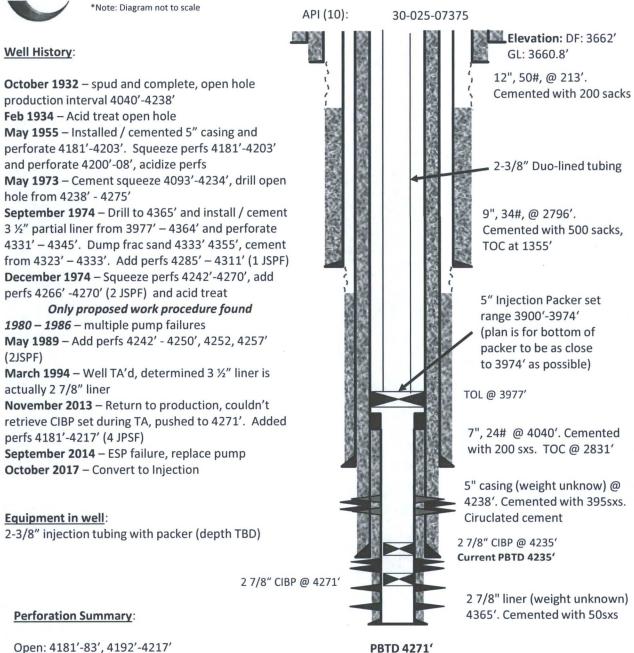
Chart dated 8/27/2001 10 NOI or Subsequent

Squeezed: 4181'-4203', 4200'-08', 4242'-4270', 4285' - 4311', 4331' - 4345',

Plugged Back: 4242'-50', 4250', 4257', 4266' -4270'



NHU 20-111 Proposed Wellbore Diagram (as of September-2017)

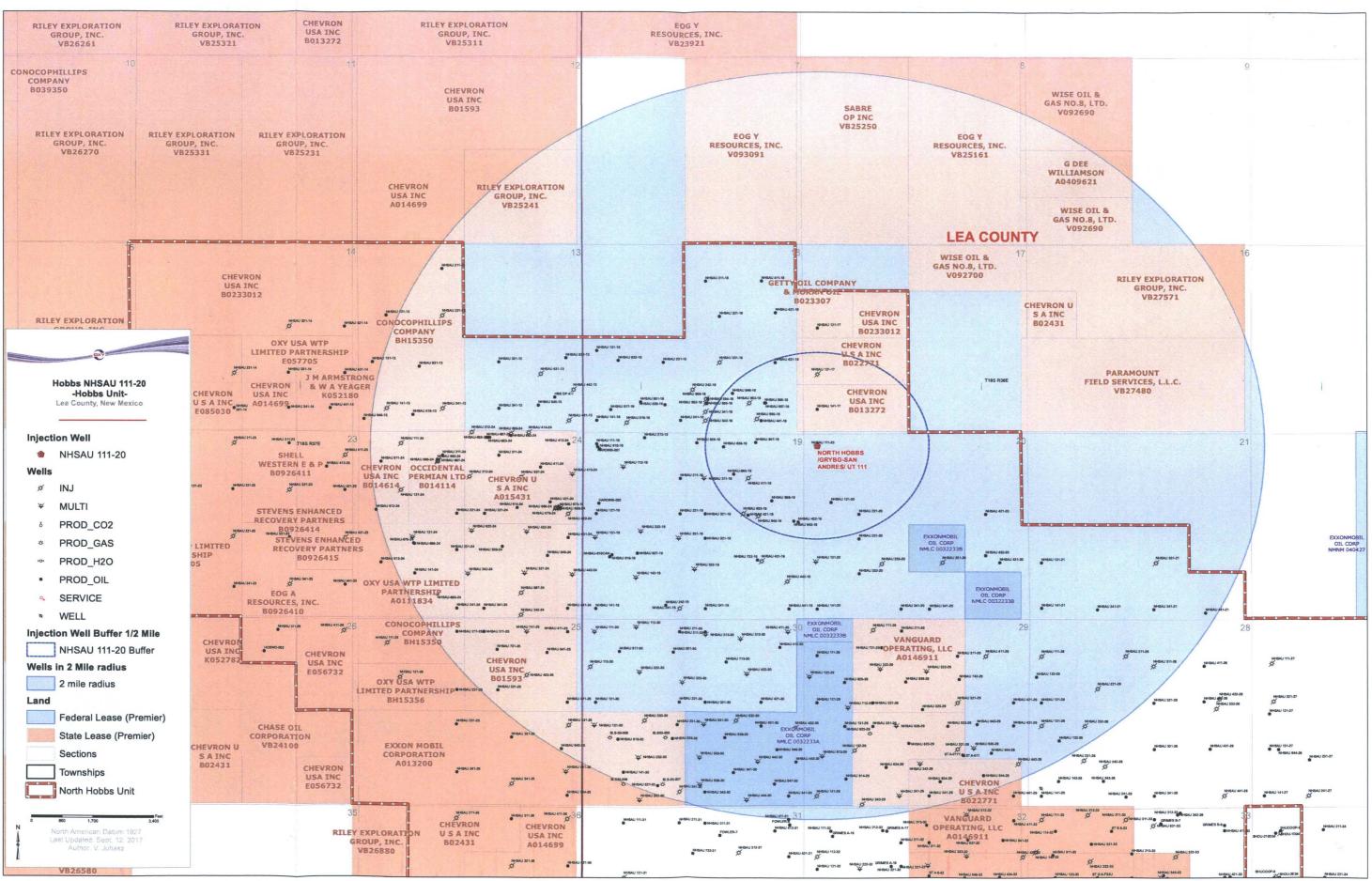


TD - 4,365'

<u>Squeezed:</u> 4181'-4203', 4200'-08', 4242'-4270', 4285' - 4311', 4331' - 4345',

<u>Plugged Back</u>: 4242'-50', 4250', 4257', 4266' - 4270'

istrict I 525 N. French D	or., Hobbs, N	M 88240		E	Energ		itate of N inerals &		Mexico tural Resource	HOBBS C	CD Re	evised	Form C-102 October 12, 2005
istrict_II 101 W. Grand A istrict_III 100 Rio Brazos istrict_IV			10	(		220		St. Fra	N DIVISION ancis Dr. 37505	MAR 1.SAU		Sta Fe	riate District Office te Lease - 4 Copies te Lease - 3 Copies
20 S. St. Franci	is Dr., Santa			CAT	FION	1					- 41	AM	ENDED REPORT
	¹ API Numb			and the second se	² Pool	and the second se	ND AC	REA	GE DEDICA	3 Pool Na	The state of the second se		]
	025-0737					920			Hob	bs; Grayburg	- San A	Andre	s
4 Property	Code						⁵ Prop	erty Na					6 Well Number
1953						N	orth Hob						111
⁷ OGRIE								ator Na					⁹ Elevation
1579	84					_			nian Ltd.				3662' DF
		and the structure from				10	Surface	Loca	Contract of the local division of the local			_	
IL or lot no.	Section	Township	Rar	ige	Lot	. ldn	Feet fro	m the	North/South line	Feet from the	East/Wes	st line	County
D	20	18-S	38-1				330		North	330	West	t	Lea
			11 6	Botto	m Ho	le L	ocation I	f Diff	erent From Su	rface			
JL or lot no.	Section	Township	Rai	nge	Loi	. Idn	Feet fro	om the	North/South line	Feet from the	East/We	st line	County
Dedicated Acro	es 13 Join	nt or Infill	14 Consolid	ation C	Code	15 Or	der No.	1		and the second			
40													
330'										complete to the b organization eith interest in the lar or has a right to contract with an to a voluntary po heretofore entered Signature Mark St 18SURVE	est of my knim er owns a won ad including it drill this well awner of such aling agreenin d by the divis <b>k. Skej</b> ephens	wledge rking in he prop at this in a mine ent or a ann.	ontained herem is true and and belief, and that this terest or unleased mineral ased bottom hole location location pursuant to a ral or working interest, or compulsory pooling order 3/17/14 Date TIFICATION shown on this plat
											supervision, c e hest of my h	and that behef.	surveys made by the same is true



Document Path: M:\PEOR\REQUESTS\Jennifer Bolden\Hobbs_Environmental_Map_ForEDIT.mxd



5 Greenway Plaza, Suite 110, Houston, Texas 77046-0521 P.O. Box 27570, Houston, Texas 77227-7570 Phone 713.215.7000

SEP 20

⊳ ©

September 18, 2017

State of New Mexico Energy, Minerals & Natural Resources Department Oil Conservation Division 1220 S. St. Frances Dr. Santa Fe, NM 87505

RE: Pressure Maintenance Project North Hobbs Unit Well No. 111 API 30-025-07375 Letter D, Section 20, T-18S, R-38E Lea County, NM

To Mr. Richard Ezeanyim, Chief Engineer:

Occidental Permian Ltd. respectfully request administrative approval, without hearing, to commence injection (water, CO2, and produced gas) per the authorized Order No. R-6199-F. In support of this request please find the following documentation:

- Administrative Application Checklist
- Form C-108 with miscellaneous data attached
- An Injection Well Data Sheet with Wellbore Schematic
- Form C-102
- Мар

*** Per Order No. R-6199-F, this application is eligible for administrative approval without notice or hearing ***

If you have any questions regarding this application, please contact me at 713-366-5771 or email april_hood@oxy.com.

NOU. Sincerely

April Hood Regulatory Specialist

# C-108 Application Attachment Occidental Permian Ltd. North Hobbs Unit No. 111 Lea County, New Mexico

V. Two maps are attached.

VII. The area of review is attached. If cement tops were not available, the top of cement was calculated using 1.32 cubic feet/sack of cement and 70% fill.

1.	Average Injection Rate	N/A
	Maximum Injection Rate	5000 BWPD / 10000

- 2 This will be a closed system.
- Average Surface Injection Pressure N/A Maximum Surface Injection Pressure Produced Water 1100 PSI CO2 1250 PSI CO2 w/produced gas 1770 PSI
   (In accordance with Order No. R-4934-F, effective 7/18/13)
- 4. Source Water San Andres Produced Water (Analysis previously provided at hearing, Case No. 14981)
- IX. Acid treatment of injection interval may be performed during well workover (approximately 2000 gal. of 15% HCL)

XII. NA. This is a pressure maintenance project, not a disposal well.

XIII. Per Order No. R-4934-F, this application is eligible for administrative approval without notice or hearing.

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

	APPLICATION FOR AUTHORIZATION TO INJECT
I.	PURPOSE:       Secondary Recovery       X       Pressure Maintenance       Disposal       Storage         Application qualifies for administrative approval?       X       Yes       No
П.	OPERATOR:Occidental Permian LTD.
	ADDRESS: PO Box 4294 Houston, TX 77210
	CONTACT PARTY: April Hood PHONE: 713-366-5771
Ш.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project? X Yes No If yes, give the Division order number authorizing the project: R-6199-F (May 22, 2014)
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	<ol> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,</li> <li>If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).</li> </ol>
*VIII.	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME: April Hood
	SIGNATURE:DATE:D9/18/17
	E-MAIL ADDRESS: April_Hood@Oxy.com

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: Case No. 15103 Order R6199-F - Effective May 22, 2014

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Side 2

#### III. WELL DATA

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

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

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

#### XIV. PROOF OF NOTICE

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

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

#### NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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

# C-108 Application Attachment Occidental Permian Ltd. North Hobbs Unit No. 944 Lea County, New Mexico

V. Two maps are attached.

VII. The area of review is attached.. If cement tops were not available, the top of cement was calculated using 1.32 cubic feet/sack of cement and 70% fill.

1.	Average Injection Rate	N/A			
	Maximum Injection Rate	15000 BWPD / 30000			

2 This will be a closed system.

- Average Surface Injection Pressure N/A Maximum Surface Injection Pressure Produced Water 1100 PSI CO2 1250 PSI CO2 w/produced gas 1770 PSI
   (In accordance with Order No. R-4934-F, effective 7/18/13)
- 4. Source Water San Andres Produced Water (Analysis previously provided at hearing, Case No. 14981)
- IX. Acid treatment of injection interval may be performed during well workover (approximately 30000 gal. of 15% HCL)

XII. NA. This is a pressure maintenance project, not a disposal well.

XIII. Per Order No. R-4934-F, this application is eligible for administrative approval without notice or hearing.

# INJECTION WELL DATA SHEET

OPERATOR:	Occidental Permian LTD.
-----------	-------------------------

# WELL NAME & NUMBER: North Hobbs Unit No. 944.

WELL LOCATION:	1528' FSL & 854' FEL	I.	29	18S	38E			
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE			
<u>WELL</u>	BORE SCHEMATIC		WELL CONSTRUCTION DATA Surface Casing					
		Hole Size: 13 - 3.	/4*	Casing Size:	9 - 5/8"			
		Cemented with:9	50sx.	or	ft ³			
		Top of Cement:S	urface	Method Determined	1: Circulated			
			Intermedia	ate Casing	~			
		Hole Size: 8-	3/4"	Casing Size:	7"			
	2 	Cemented with:165	i0sx.	or	ft ³			
		Top of Cement:	ace.	Method Determined	l: Circulated			
			Productio	n Casing				
l		Hole Size:6 - 1	/8"	Casing Size:	lole			
· · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	Cemented with:	SX.	or	ft ³			
-		Top of Cement:		Method Determined	l:			
		Total Depth:	- (4039' TVD)					
· · ·		<del>-</del> .	Injection	Interval				
	×.	4996' MD -	(4039' TVD)fee	t to6450' MD - (4025'	TVD) - OPEN HOLE			
			Perforated or Onen L	Iole: indicate which)				

 $\mathbf{n}$ 

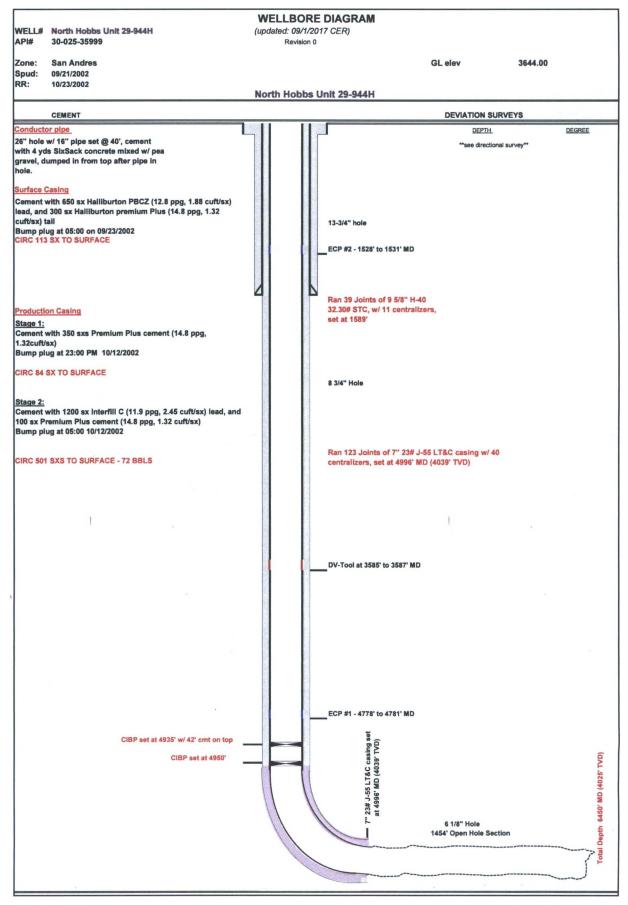
Side 1

### **INJECTION WELL DATA SHEET**

1	De of Packer: 7" x 4 1-2" 17-26# AS1-X Double Grip injection Packer
Pac	ker Setting Depth:
)tł	er Type of Tubing/Casing Seal (if applicable):
	Additional Data
1.	Is this a new well drilled for injection?YesYo
	If no, for what purpose was the well originally drilled?Producer
2.	Name of the Injection Formation:
3.	Name of Field or Pool (if applicable):
4.	Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used
5.	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
	Byers (Queen) @ +/- 3680'
	Glorieta @ +/- 5300'

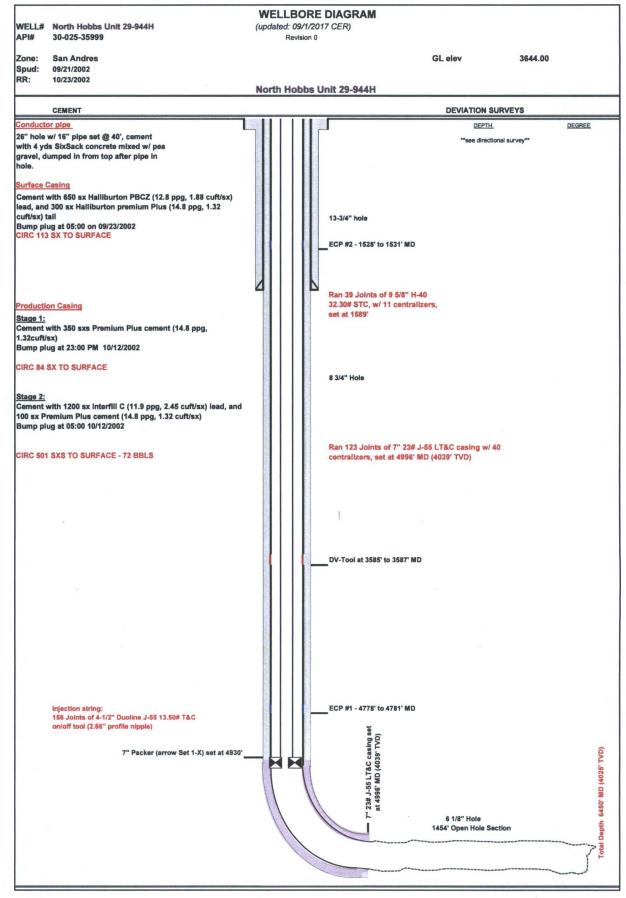
- , s¹

· · ·



Wellbore - Current111.xlsx

printed: 09/12/2017 1:33 PM



Wellbore - Propose.xisx

printed: 09/12/2017 1:41 PM

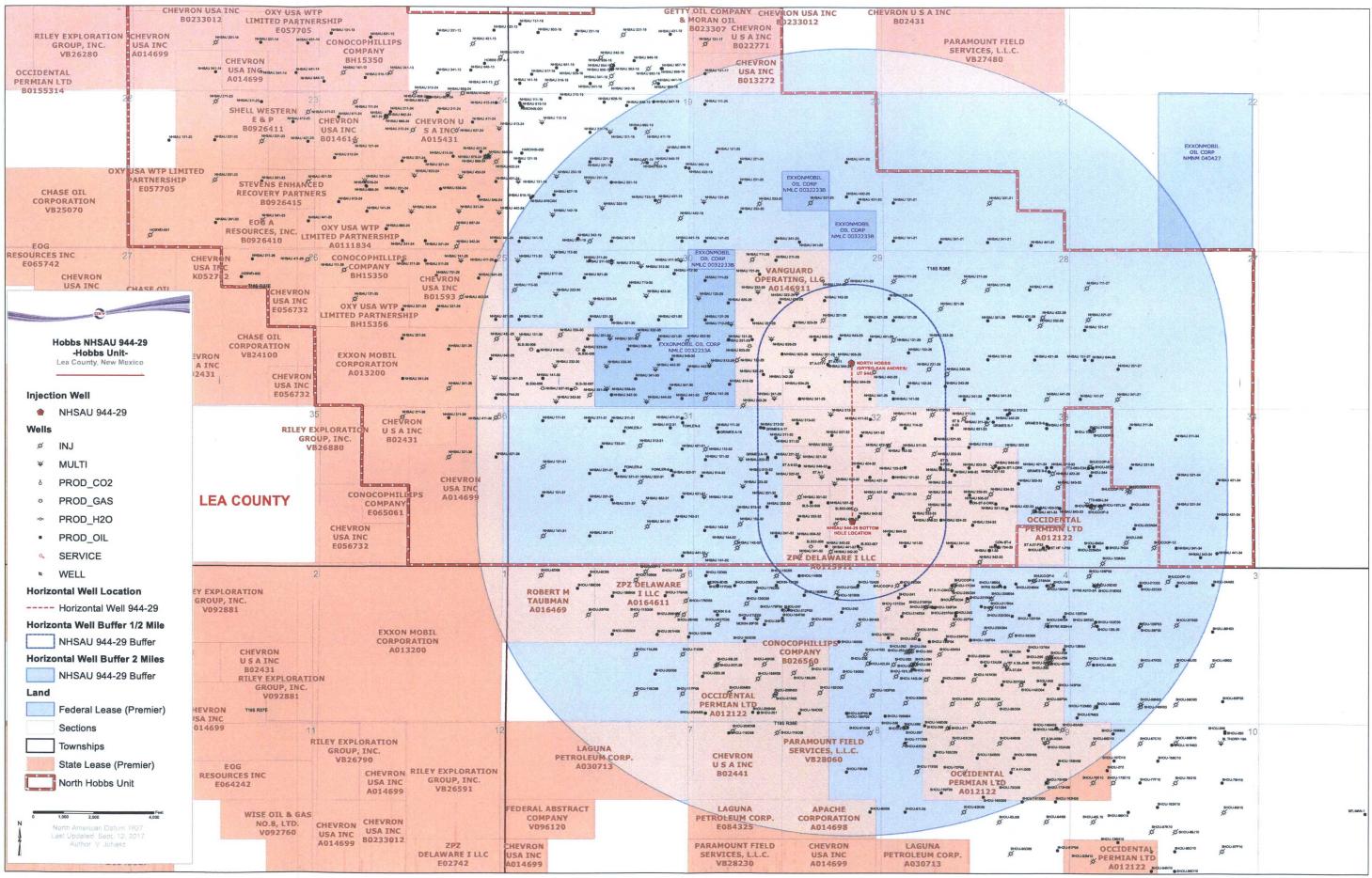
4 8.44

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 South First, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 2040 South Pacheco, Santa Fe, NM 87505 State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505 Form C-102 Revised October 18, 1994 Instructions on back Submit to Appropriate District Office State Lease – 4 Copies Fee Lease – 3 Copies

> X AMENDED REPORT Revised Pen. Pt. & BHL

		WE	LL LOO	CATION	AND AC	REAGE	DEDICA	ATION PI	AT		
	API Numb	Number Pool Code Pool Name									
30-0	25-3	5999									S
Property			Property Name Well Number								
1952	0			Nortl	h Hobbs	(GSA)	Unit				944
OGRID					Operato						Elevation
15798	34		Occio	lental f	Permian	Limited	l Parti	nership			3644'
					Surface	Location	n				
UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/Sou	th line	Feet from the	East/West	line	County
1	29	18-S	38-E		1528	SOL	ith	854	Ea	st	Lea
			Botto	om Hol	e Location	If Differ	ent Fron	n Surface			
UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/Sou	th line	Feet from the	East/West	line	County
Н	32	18-S	38-E		1505	Nor	-th	917	Ea	stos	Eea
Dedicated Acro	s Joint	or Infill (	Consolidation	Code O	rder No.				1	2. Chi	136.8
		1	U						18	· 1.	3
NO ALLOY	WABLE V				IS COMPLET					EN CO	NSOCIDATED
	1	<u>UK A</u>	<u>NON-51</u>	ANDARD	UNIT HAS I	SEEN APP	KOVED E		ç.,	11	15 15
											HEATION
											notained herein is (), nowledge and belief.'
										Sec.	2211101012
											261.6.
								- Man Signature	K. Stor	her	
								Mark Printed Nam	Stepher	าร	
		T	944 944	-						omolia	nce Analyst
		T	828	1				Title			
		1022'		Penetro	itlen Point				23, 200	3	
		9, 2,	11 SEC. 29	1 SEC. 28				Date		_	
		in		1. SEC. 33				SURV	EYOR	CERT	IFICATION
		1505	e i								shown on this plat
							·				al surveys made by at the same is true
		1	917'	4			L.	and correct to			a ar saar is aar
								1			
								Date of Surve			
								Signature and	1 Seal of Pro	ofessional Su	urveyor
						12	177				
			330' Ur	it Bounda	ry Offset Lin	e/					
			North	Hobbs (GS	A) Unit Bound	ary +					
1777	11	111	17	17	1111	77		Certificate Nu	umber		



Document Path: M:\PEOR\REQUESTS\Jennifer Bolden\Hobbs_Environmental_Map_ForEDIT.mxd

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

بە. ب

#### **APPLICATION FOR AUTHORIZATION TO INJECT**

I.	PURPOSE: Application qu	Secondary Recovery alifies for administrative approval?	X	_Pressure Maintenance Yes	_No	_Disposal	Storage
П.	OPERATOR:	Occidental Permian LTD.					· ·
	ADDRESS:	PO Box 4294 Houston, TX 77210					
	CONTACT PA	RTY: April Hood				_PHONE: _	713-366-5771
Ш.	WELL DATA	Complete the data required on the Additional sheets may be attached			ell proposed	for injection.	
IV.		nsion of an existing project?	102		99-F (May 22	2, 2014)	

- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
  - 1. Proposed average and maximum daily rate and volume of fluids to be injected;
  - 2. Whether the system is open or closed;
  - 3. Proposed average and maximum injection pressure;
  - 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  - 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV.	Certification:	I hereby certify	that the info	ormation s	ubmitted	with this application	n is true and	correct to the	best of my	knowledge and
	belief.		$\wedge$	1	1		,			

NAME: April Hood	Appil Hood	TITLE: Regulate	ory Specialist
SIGNATURE:		DATE:	09/18/17
E-MAIL ADDRESS:	April_Hood@Oxy.com	·	

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: Case No. 15103 Order R6199-F - Effective May 22, 2014

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

. **K** 

Side 2

#### III. WELL DATA

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

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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

C-108 Application Attachment Occidental Permian Ltd. North Hobbs Unit No. 923 Lea County, New Mexico

V. Two maps are attached.

VII. The area of review is attached. If cement tops were not available, the top of cement was calculated using 1.32 cubic feet/sack of cement and 70% fill.

1.	Average Injection Rate	N/A
	Maximum Injection Rate	15000 BWPD / 30000

- 2 This will be a closed system.
- Average Surface Injection Pressure N/A Maximum Surface Injection Pressure Produced Water 1100 PSI CO2 1250 PSI CO2 w/produced gas 1770 PSI (In accordance with Order No. R-4934-F, effective 7/18/13)
- 4. Source Water San Andres Produced Water (Analysis previously provided at hearing, Case No. 14981)
- IX. Acid treatment of injection interval may be performed during well workover (approximately 40000 gal. of 15% HCL)

XII. NA. This is a pressure maintenance project, not a disposal well.

XIII. Per Order No. R-4934-F, this application is eligible for administrative approval without notice or hearing.

### **INJECTION WELL DATA SHEET**

OPERATOR: Occidental Permian LTD.

# WELL NAME & NUMBER: _____ North Hobbs Unit No. 923.

1

.

WELL LOCATION:	2114' FSL & 1568' FWL	к	29	18S	38E
-	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
<u>WELLBORE SCHEMATIC</u>			<u>WELL C</u> Surface	<u>ONSTRUCTION DAT</u> Casing	<u>74</u>
		Hole Size: ^{13 - 3}	/4"	Casing Size:	9 - 5/8"
	7	Cemented with:9	50 sx.	or	ft ³
		Top of Cement:	Surface	Method Determined	: Circulated
			Intermedia	te Casing	
·	χ.	Hole Size:8-	3/4"	Casing Size:	7"
		Cemented with:14	50 SX.	or	ft ³
· .		Top of Cement:	face.	Method Determined	1: Circulated
		,	<u>Productio</u>	n Casing	
		Hole Size:6 - ^	1/8"	Casing Size: Open H	lole
		Cemented with:	SX.	or	ft ³
		Top of Cement:		Method Determined	l:
	· · ·	Total Depth: 5161' MD (	4049' TVD) to 7037' MD (	4068' TVD)	
·			Injection	Interval	
		5161' MD	- (4049' TVD)fee	t to 7037' MD - (4068'	TVD) - OPEN HOLE

(Perforated or Open Hole; indicate which)

0

Side 1

# **INJECTION WELL DATA SHEET**

Tubing Size:	4 - 1/2"	_Lining Material: _	Duoline
	7" x 4 1-2" 17-26# AS1-X Double Grip inje		
	g Depth:		
Other Type o	Tubing/Casing Seal (if applicable	e):	
	Add	itional Data	·
1. Is this a	new well drilled for injection?	Ye	s <u>×</u> No
If no, for	what purpose was the well origin	ally drilled? Produce	r
2. Name of	the Injection Formation:	Ires	· · · · · · · · · · · · · · · · · · ·
3. Name of	Field or Pool (if applicable):	bs; Grayburg - San Andres	
4. Has the	vell ever been perforated in any ot and give plugging detail, i.e. sack	her zone(s)? List all	such perforated
	name and depths of any oil or gas zone in this area:		
Byers (Qu	een) @ +/- 3680'		
Glorieta @	+/- 5300'		
	<u> </u>		

WELLBORE DIAGRAM									
WELL# North Hobbs Unit 29 API# 30-025-36011	9-923H	(update	d: 09/1. Revisio		CER)				
Zone: San Andres Spud: 10/25/2002						GL	elev	3645.00	
RR: 11/21/2002		North	Habb		nit 29-923H				
		North	HODD	is ur	111 29-9231				
CEMENT			1.1				DEVIATION SUR	RVEYS	
Conductor pipe 26" hole w/ 16" pipe set @ 40', c	ement						DEPTH		DEGREE
with 4 yds SixSack concrete mix gravel, dumped in from top after	ced w/ pea						**see directiona	al survey	
hole.	pipe in								
Surface Casing									
Cement with 650 sx Halliburton lead, and 300 sx Halliburton pres									
cuft/sx) tail					13.750" hole				
Bump plug at 10:00 on 10/27/200 CIRC 72 SX TO SURFACE	12								
				⊢	ECP #2 - 1468' to 14	71.8' MD			
		4		6					
Production Casing					Ran 39 Joints of 9 32.30# STC, w/ 13				
Stage 1:					set at 1560'				
Cement with 350 sxs Premium P 1.32cuft/sx)	Plus cement (14.2 ppg,								
Bump plug at 12:30 AM 10/24/20	)14								
CIRC 42 SX TO SURFACE									
					8 3/4" Hole				
Stage 2: Cement with 1000 sx Interfill C (	11.9 ppg, 2.45 cuft/sx) lead, and								
100 sx Premium Plus cement (14 Bump plug at 17:00 11/08/2002									
CIRC 480 SXS TO SURFACE - 72					Ran 125 Joints of	7" 23# J-55 LT	&C casing w/ 46		
CIRC 480 3A3 TO SURFACE - 72	BOLS				centralizers, set a				
									1
									1
				-	DV-Tool at 3564.7' to	o 3566.9' MD			
					ECP #1 - 4718' to 47	21' MD			
	oduction string:								
15	8 Joints of 2 7/8" J-55 6.5# T&C /off tool (1.875" profile nipple)			100	(D)				
					casir 49' TI				(QA)
7"	Packer (arrow Set 1-X) set at 5038'			-	/ 7" 23# J-55 LT&C casing set at 5161' MD (4049' TVD)				068' 1
			/	1	J-55 L 61' M				4D (4
2		1		1	23# at 51				037'
		1		1	L L	187	6 1/8" Hole 6' Open Hole Secti	ion	oth 7
		1	1						Total Depth 7037 MD (4068' TVD)
			1						Tot
34					3		***************		

Wellbore - Current.xisx

printed: 09/12/2017 12:21 PM

>

			RE DIAGRAM
WELL#	North Hobbs Unit 29-923H 30-025-36011		d: 09/1/2017 CER) Revision 0
Zone: Spud:	San Andres 10/25/2002		GL elev 3645.00
RR:	11/21/2002	North H	Hobbs Unit 29-923H
	CEMENT		DEVIATION SURVEYS
Conducto			DEPTH DEGREE
SixSack o	r/ 16" pipe set @ 40', cement with 4 yds oncrete mixed w/ pea gravel, dumped in ifter pipe in hole. asing		**see directional survey**
Halliburto Bump plu	ith 650 ax Halliburton PBCZ (12.8 ppg, 1.88 cuft/sx) lead, and 300 sx n premium Plus (14.8 ppg, 1.32 cuft/sx) tail g at 10:00 on 10/27/2002 X TO SURFACE		13.750" hole ECP #2 - 1468' to 1471.8' MD
	n Casing Ith 350 sxs Premium Plus cement (14.2 ppg, 1.32cuft/sx) g at 12:30 AM 10/24/2014	2	Ran 39 Joints of 9 5/8" H-40 32.30# STC, w/ 13 centralizers, set at 1560'
Stage 2:	X TO SURFACE ith 1000 sx Interfill C (11.9 ppg, 2.45 cuft/sx) lead, and 100 sx		8 3/4" Hole
Bump plu	Plus cement (14.8 ppg, 1.32 cuft/sx) g at 17:00 11/08/2002 SXS TO SURFACE - 72 BBLS		Ran 125 Joints of 7" 23# J-55 LT&C casing w/ 46 centralizers, set at 5161' MD (4049' TVD)
			DV-Tool at 3564.7' to 3566.9' MD
	Injection string:		ECP #1 - 4718' to 4721' MD
	198 Joints of 4-1/2" Duoline J-55 13.50# T&C on/off tool (2.66" profile nipple) 7" Packer (arrow Set 1-X) set at 5100'		7" 23# J-56 LT&C casing set at 5161' MD (4049' TVD) at 5161' MD (4049' TVD) at 5161' MD (4049' TVD)

Wellbore - Propose.xisx

printed: 09/12/2017 1:40 PM

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 South First, Artesia, NM 88210

District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV

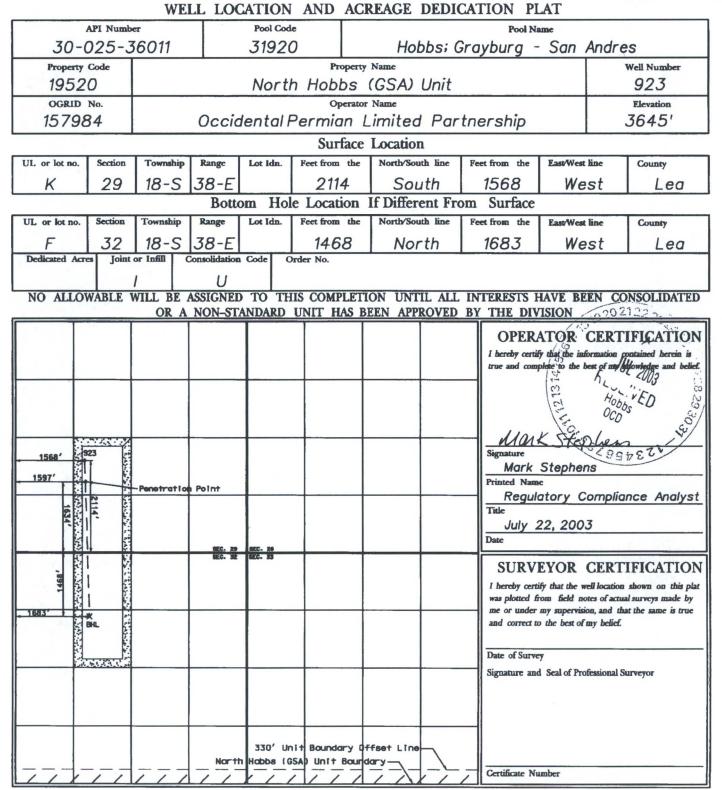
2040 South Pacheco, Santa Fe, NM 87505

#### State of New Mexico Energy, Minerals & Natural Resources Department

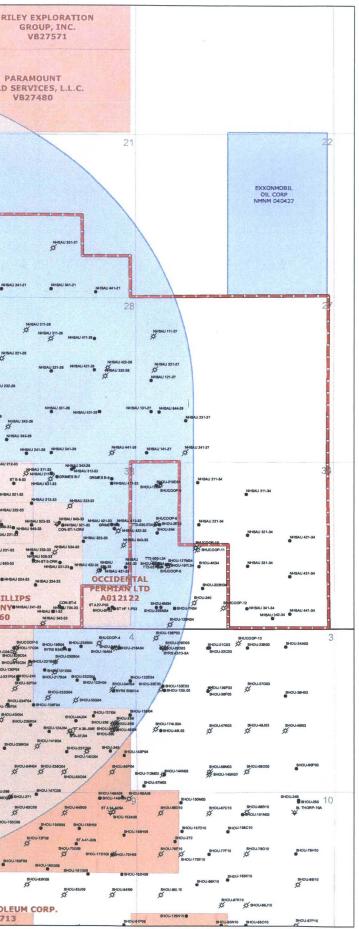
· · · ·

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505 Form C-102 Revised October 18, 1994 Instructions on back Submit to Appropriate District Office State Lease – 4 Copies Fee Lease – 3 Copies

> AMENDED REPORT Revised Pen. Pt. & BHL



							a landir anna canad a	
		CHEVRON CUSA INC	NHSAU 121-13 NHSAU 221 13			NHSAU 421-18 MORAL	OMPANY & NOIL CHEVRON 307 USA INC	CHEVRON RILL
		B0233012 MIGAU 321-14 NHIGAU 421-14 XY USA WTP LIMITED	CONOCOPHILLIPS		-		ISAU 121-17 B0233012	B02431
	EXPLORATION CHEVRON	PARTNERSHIP E057705	COMPANY BH15350	NHRALI 331.13 NHRALI 43	NHSAU 131-18 32-13 NHSAU 833-16	NHSAU 331-18 NURALLATE 16	CHEVRON	
	/B26280 USA INC /B26280 A014699	NHSAU 231-14 X NHSAU 331-14	NH5AU 831-13	NHSAU 431-13	• •	XX NH	USAINC B022771	PAR
CHEVRON				HOBBS OF A-1 NHSAU (45-13	NHSAU 951-18 NHSAU 9	NHSAU 242-18 NHSAU 946-18 59-18 15550 952-16 NHSAU 957-16	CHEVRON	FIELD SE VI
USA INC B013304		NHEAU 241-14 NHEAU 311-14 NHEAU 441-14 J M ARMSTRONG	NHBAU 141-13 NHBAU 241-13	NHSAU 341-13 NHSAU 40-13	NHSAU 517-18 NHSAU 529-1 441-13 NHSAU 516-18 NHSAU 229-1 NHSAU 516-18 NHSAU 2	W 85475711415AU 955-18 XI 18 X NHSAU 341-16 953-18 NHSAU 956-18 NHSAU N1-18 X NHSAU 342-18 XIII NHSAU 441-18	B013272	
21	*	& W A YEAGER MISAU211-23 K052180 23	NHSAU 312-34 NHSAU 111-24 NHSAU 863-24	NHSAU 859-24 BAU-855-32 NHSAU 114-24 953-24 HSAU-657-24 NHSAU 412-24	NHSAU 141-18-2 NHSAU 212-19	NHSAU 628-19 NHSAU 628-19 NHSAU 628-19 NHSAU 628-19 NHSAU 547-19	14U 111-20	
RILEY EXPLORATION		SHELL WESTERN	1-23 NHSAU 87-24 NHSAU 211-24 911-24 NHSAU 667-24 9 11-24 NHSAU 667-24 9	NHSAU 311-24 NHSAU 413-24	NHSAU 615-19 NARDINB-001 NHSAU 112-19			
CHEVRON GROUP, INC. U S A INC VB25031		B0926411	USA INC	XENHBAU 837-24 WHEA	NHSAU 2	H1-19 HIBAU-950-19 NHSAU 311-19 NHSAU 411-19	LEA COUNTY	
A015431 CHEVRON	NHBAU 121-23		NHBAU 121-24	NHSAU 61424 NHSAU 421-24	HARDINE-002	NHSAU 958-19	NHSAU 121-20	
USA INC B0156512	OXY USA WTP LIMIT	ED NIM	PERMIAN LTD	NHSAU 675-24 NHSAU 689-24 NHSAU 699-24 NHSAU 492-24 NHSAU 432-24 NHSAU 432-24	0-24 NH5AU 121-19 422-24 NH6AU 232-19	W 221-19 NHSAU 932-19 NHSAU 945-19 NHSAU 321-19 NHSAU 421-19 NHSAU 321-19 NHSAU 422	NHSAU 221-20 19 EXXONMOBI	NH9AU 421-30
50136312	PARTNERSHIP E057705	* STEVENS ENHANCED	11-23 B014114	NHEAL SJ5-24	431-24 NHEAU 131-19 ¥ NHEAU 2	01-19 @NHISAU 331-19	NHSAU 231-20     OIL CORP     NMLC 003223	
CHASE OIL CORPORATION		RECOVERY PARTNERS B0926415	NHBAU 613-24 NHBAU 141-24	NHSAU 545-24	HSAU 616-19 NHSAU-616CAN AU 442-24	NHISAU 332-19 NHISAU 431-198955AU 733-19	8AU 131-20 NHBAU 233-20 NHBAU 235-20 NHBAU 235-20 XHBAU 235-20	AU 331-20 NHSAU 431-20 NHSAU 131-21
CHEVRON VB25070 USA INC	T18S R37	NHISAU 241.23 NHISAU 44		₩ ¥	¥ NARSAU 142-18	NHBAU 442-19		EXXONMOBIL OIL CORP
A014699	HGBWD-001	RESOURCES, INC. LIMIT	ED PARTNERSHIP	NHSAU 44	-24 NHSAU 141-19 NHSAU 202-	19 NHSALI 441-19 NH	SAU 141-20 NH5AU 241-20 SNH5AU 34	NMLC 00322335 11-20 T18S R38E NH8AU 141-21 NH8AU 241
28 EOG	27	NHSAU STI-26 MERULAN A 200	A0111834 NHAUZHIZA N CONOCOPHILLIPS	NHSAU 741-25 NHSAU 411-25-25	NHSAU 111-30 ¥ NHSAU 12-30	11-30 NHSAU 411-30230 OIL	CORP CORP	29
		USA INC HOSWO-002 CHEVRON NHS	WIII-25 FOMPANY	ISAU 311-25 ISAU 731-25 IEVRON NHSAU 641-25	NHSAU 817-30 NHSAU 6	11-302 NHSAU 313-30 NMSAU 312-30 NMLC 0 121-30 NHSAU 412-30 NMSAU 412-30 NM	NHSAU111.29	NHSAU 311-39 NHSAU 111-28
DXY	INC CHASE OIL 2782 CORPORATION	USA INC E056732	U	SA INC 01593 #NHBAU 422-25	NHSAU 113-30	NHEAU 713-30 NHEAU 422-30 NHEAU 12	2.29 NHSAU 222.20 HHSAU 322.	28 NHSAU 742-29 NHSAU 122-28
Hobbs NHSAU 923-29	VB24100		OXY USA WTP NEW 21-28		-25 NHSAU 121-30 NHSA	11 221.50 NHRA11 471.50 NHR	MIBAU 625-29     MIBAU 635-29     MIBAU 635-29     MIBAU 635-29	NHSAU 221-29 NUMBER OF THE ANIMAL CALL IN
-Hobbs Unit- Lea County, New Mexico		CHASE OIL	BH15356	NHRAILATE	NHSAU 233-30	NHSAU 321-30 NHSAU 332-30	NORTH HOBBSENHEAU 323-22 /GRYBG-SAN ANDRES/	
	CHE	CORPORATION VRON VB24100	NHBAU 231-28	NHSAU 331-26	SL5.36.005	1237 302 NHSAU 331-30 NHSAU 431-30 NHSAU 432-30 NHSAU 336-30 X 1 S25-30 S25-30	NHSAU 53-29 UT 923¥ NHSAU 626-29 ON	NHBAU 53-28 NHBAU 131-28 X NHBAU 131-28 X NHBAU 132-28
Injection Well	US	AINC	EXXON MOBIL	NHSAU 64	2,25 NHSAU (16-30 8: 530-005 NHSAU (22-30	NHIBAU 533-30 NHIBAU 442-30 NHIBAU 442-30 NHIBAU 442-30		AU 331-29 사용AU 638-29 상 부 NHSAU 944-29 이 아이 57A-01 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이
NHSAU 923-29		CHEVRON	CORPORATION NIBAU 21 28 A013200	NHISAU 341-25	441-25 NHSAU 141-30 8LS30-006 NHSAU 527-30 SLS-30-007	NHBAU 536-30 NHBAU 536-30 NHBAU 536-30	233A HHBAU 814-29 NHSAU 54-29 NHSAU 634-29	EVRON U S A X INIBAU 44228 X INIBAU 44228 X INIBAU 14228 NIBAU 14228 NIBAU 14228 NIBAU 14228
Wells		E056732		At NetSALD7	744-25 NHISAU 342-30 XX	NHSAU 444.30 NHSAU 441.30 NH	AU 141-29 NHEAU 242-29 X	B022771 NISAU44128 NISAU 14126
i MJ	34	35	CHEVRON	NHSAU 311-36 NHSAU 411-36 386	NHSAU 111-31 NHSAU 2	11.31 NHSAU 311.31 HISAU 411.31 31	NHSAU 111-32 NHSAU 212-32	₩HBAU 212-32 ₩HBAU 212-32 ₩HBAU 212-33 ₩HBAU 212-33 ₩
¥ MULTI		GROUI	LORATION USAINC P, INC. B02431	Section 19		FOWLER-7 GRIMES / GRIMES / GRIMES / MHSAU 312-31 MHSAU 312-31 MHSAU 312-31 MHSAU 421-31 / MHSAU 421 / MHSAU 421-31 / MHSAU 421	10 GRIMÉSA. #9 NHSAU 211-32 BISAU 311-32	NHSAU 541-32 NHSAU 537-32
^δ PROD_CO2		VB2(	6880	NHSAU 321-38 NHSAU	421-36 NHBAU 121-31	NHISAU 12231 2 NHISAU 12231	NHSAU 112-32 SAU 121-32 GEIMES A-15 NHSAU 221 W NHSAU 3	U 322-32 NHBAU 422-32 X NHBAU 511-33 ¥ X NHBAU 122-33 X NHBAU 222-3 121-32
✤ PROD_GAS	ORATION				AF NHSA	W 221-31 FOWLER-8 FOWLER-8 NHSAU 422-31 NHSAU 322-31 NHSAU 322-31 NHSAU 322-31	NHSAU 512-32 NHSAU 5 NHSAU 512-32 NHSAU 5 NHSAU 923-29 NHSAU 322	NHSAU 224-32 ST G 6-F33U NHSAU 123-33 NHSAU 123-33 NHSAU 228-33 N W
PROD_H2O	INC. 180		CONOCOPHILUIPS	CHEVRON USA INC	NHSAU 131-31	₩ 231-31 WHEAU 431-31	NHSAU 223-22 BOTTOM HOLE LOCATION NHSAU 231-24	ST A-12- NHSAU 421-32 NHSAU 421-33 NHSAU 231-33 1-32 NHSAU 423-32 NHSAU 431-32 NHSAU 231-33 NHSAU 231-33
PROD_OIL			COMPANY E065061	A014699		NHSAU 331-31	NHISAU 913-32 NHISAU 232-32 NHISAU 232-32	0009 @NHISAU 531-32 NHISAU 653-33 81.532-008 22 NHISAU 542-32 NHISAU 222-33
	EOG		CHEVRON		NHSAU 141-31 MHRA	NHBAU 341-31	NHBAU 132-32	42 NA MAU 432-32 NHBAU 432-33 O NHBAU 82
∞ WELL	SOURCES INC		USA INC E056732		* •		NHSAU 144-32 NHSAU 142-32 NHSAU 241-32 NHSAU 54-5 NHSAU 54-5 N	CONOCOPHILLI
Horizontal Well Locaion	E085681	-				BHUDODE-4		LAWARE I LLC B026560
NHSAU 923	3	2		1	SHOU-1980		SHOU-148	
Horizontal Well Buffer 2 Miles	, INC.	GROUP, INC.			ROBERT M TAUBMAN	SHOU-19980 ILLC SHOU-175A0 A0164611 #SHOU-1760	sHOU-228D06 SHOU-178C05 SHOU-11 6 SHOU-120C05 SHOU-11	80805 HOU-181805 SHOU-241 SHOU-241 SHOU-241 SHOU-241 SHOU-241 SHOU-241 SHOU-241 SHOU-245
NHSAU 923-29 Buffer	691	V092881			A016469	-28F06 \$40U-113006 \$H0U-28H06 \$40U-208H06 \$40U-208H06	MCKN E-5 SHOU-212F0 SHOU-247 SHOU-211E05 MCKIN-29F05 SHOU-247 SHOU-W27E05 SHOU-28F05 SHOU-34F05 SHOU-34F05	SHOU-242 SHOU-23600 SHOU-231F04 SHOU-2300 SHOU-2
Horizontal Well Buffer 1/2 Mile			EXXON MOBI	L.		SHOU-200008 SHOU-201H08 SHOU-123H0	SHOU_163E95	SHOU 16EOA SHOU 31EOA SHOU 31EOA SHOU 31EOA
NHSAU 923-29 Buffer	USA INC CHEVRON		CORPORATIO A013200			SHOU-114,005 SHOU-115106	CONOCOPHIL COMPANY	Y SHOU-41/03 SHOU-253 SHOU-255 SHOU-43K0
Land	0923 USA INC B013282	U S A INC B02431				SHOU-20206	BIOLISIAS SHOULIKKS B026560 Strahou-207.05 SHOU U-203L05 SHOU-158K05 SHOU	HOU-285 BHOU-284 HOU-285 BHOU-284 HOU-285 BHOU-19005 BHOU-19104 BHOU-285 HOU-19005 BHOU-19104 BHOU-285
Federal Lease (Premier)	CHEVRON	RILEY EXPLORATIO	N			SHOU-116005 SHOU-117P08	交 8HOU-188J05	メイ メート SHOU-140164 尖 SHOU-28 8HOU-192005 SHOU-183P95
State Lease (Premier)	USA INC E054582	GROUP, INC. V092881 IEVRON THIS BATE					10U-30M05 FEHOL-51M05 OU-204M05 SHOU-205M05 SHOU-1940	
Sections		ISA INC					SHOU-251 SHOU-299Des SHOU-119008	95HDU-198M54 5HDU-248 94DU-298 5HDU-248 5HDU-11A01 0 5HDU-249 5HDU-1481248 5HD
Townships	10 A	RILEY EXP	LORATION	18		INA	eifiliou-118008 🔆	ж о вноизет внои-тятрея вно Жнои-егора
North Hobbs Unit	OUP, INC. /095911	GROUP	790 USA THE		PETROLEU	M CORP.	CHEVRON U S A INC	T19S R36E
		RESOURCES INC	AD14600 RILE	GROUP, INC.	A030	113	B02441	SHOU-70H08 SHOU-71E09.
0 1,000 2,000 4,000		E064242		VB26591			PARAMOUNT FIEL SERVICES, L.L.C.	
North American Datum 1927 Last Updated Sept. 12, 2017			HEVRON	F	FEDERAL ABSTRACT	DET	LAGUNA VB28060 A	
Author V Juhasz	LEACO NEW MEXICO XPL. AND PROD., LLC	NO.8, LTD. U	ISA INC CHEVRON	DELAWAREILLC	V096120	PARAMOUNT FIELD SERVICES, L.L.C.	E084325 AI	014698 ON USA INC LAGUNA PETROLEU
	B0143127		B0233012	E02742	A014699	VB28230	CHEVRO	ON USA INC DIGONA PERIOLEO 114699 A030713



Document Path: M:\PEOR\REQUESTS\Jennifer Bolden\Hobbs_Environmental_Map_ForEDIT.mxd



5 Greenway Plaza, Suite 110, Houston, Texas 77046-0521 P.O. Box 27570, Houston, Texas 77227-7570 Phone 713.215.7000

2011 SEP 20 A 10:

RECEIVED

September 18, 2017

State of New Mexico **Energy, Minerals & Natural Resources Department** Oil Conservation Division 1220 S. St. Frances Dr. Santa Fe, NM 87505

**RE: Pressure Maintenance Project** North Hobbs Unit Well No. 923 API 30-025-36011 Letter K, Section 29, T-18S, R-38E Lea County, NM

To Mr. Richard Ezeanyim, Chief Engineer:

Occidental Permian Ltd. respectfully request administrative approval, without hearing, to commence injection (water, CO2, and produced gas) per the authorized Order No. R-6199-F. In support of this request please find the following documentation:

- **Administrative Application Checklist**
- Form C-108 with miscellaneous data attached
- An Injection Well Data Sheet with Wellbore Schematic
- Form C-102
- Map

*** Per Order No. R-6199-F, this application is eligible for administrative approval without notice or

hearing ***

If you have any questions regarding this application, please contact me at 713-366-5771 or email april_hood@oxy.com.

Sincerely, Mood

April Hood **Regulatory Specialist** 

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

APPLICATION OF OCCIDENTAL PERMIAN LTD TO AMEND ORDER NO. R-6199-B TO EXPAND THE NORTH HOBBS GRAYBURG-SAN ANDRES UNIT PHASE I TERTIARY RECOVERY PROJECT, TO MODIFY CERTAIN OPERATING REQUIREMENTS, AND TO CERTIFY THIS EXPANSION FOR THE RECOVERED OIL TAX RATE PURSUANT TO THE NEW MEXICO ENHANCED OIL RECOVERY ACT, LEA COUNTY, NEW MEXICO.

#### CASE NO. 15103 ORDER NO. R-6199-F

#### **ORDER OF THE COMMISSION**

This case comes before the New Mexico Oil Conservation Commission ("Commission") on the application of Occidental Permian Ltd. ("Oxy") to amend Order No. R-6199-B, as amended. The Commission, having conducted a hearing on March 13, 2014, at Santa Fe, New Mexico, and having considered the testimony and the record in the case, enters the following findings, conclusions and order:

#### THE COMMISSISION FINDS THAT:

1. Due public notice has been given, and the Commission has jurisdiction of this case and its subject matter.

2. On October 3, 1979, the Commission entered Orders No. R-6198 and R-6199 in Case Nos. 6652 and 6653 that statutorily unitized the North Hobbs Unit and approved a pressure maintenance project by the injection of water into the Grayburg and San Andres formations underlying the following acreage in Lea County, New Mexico:

#### TOWNSHIP 18 SOUTH, RANGE 37 EAST, NMPM

Section 13:	W/2, SE/4
Section 14:	All
Section 23:	All
Section 24:	All
Section 25:	All
Section 26:	E/2 NE/4, NW/4 NE/4
Section 36:	E/2, E/2 NW/4

#### TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM Section 17: S/2 NW/4, SW/4

Section 18:	NE/4 and S/2
Section 19:	All
Section 20:	All ,
Section 21:	SW/4, W/2 SE/4, SE/4 SE/4
Section 27:	All
Section 28:	All
Section 29:	All -
Section 30:	All
Section 31:	All , .
Section 32:	All
Section 33:	W/2, NE/4, W/2 SE/4, and NE/4 SE/4
Section 24.	E/2 E/2 NW/A

3. On October 22, 2011, the Energy, Minerals and Natural Resources Department Oil Conservation Division ("Division") entered Order No. R-6199-B authorizing a carbon dioxide gas tertiary recovery project within a portion of the North Hobbs Unit called the "Phase I Area" by injection of carbon dioxide (CO2), produced water, and produced gas through certain existing wells and yet to be drilled wells in the quarter-quarter sections identified on Exhibits A and B to that Order.

4. Since the entry of Order No. R-6199-B, the Division has approved additional injection wells in the Phase I area of the North Hobbs Unit through various administrative and hearing orders.

5. Oxy is the current operator of the North Hobbs Unit and now seeks the following relief from the Commission as provided in an Application filed with the Commission on February 11, 2014 ("Application"):

(a) to expand the approved geographic area for the carbon dioxide gas tertiary recovery injection project to include the following acreage:

#### TOWNSHIP 18 SOUTH, RANGE 37 EAST, NMPM

Section 13:	W/2, SE/4
Section 14:	All
Section 23:	All
Section 24:	All
Section 25:	All
Section 26:	E/2 NE/4, NW/4 NE/4
Section 36:	E/2, E/2 NW/4

#### TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM

Section 17:	S/2 NW/4, SW/4
Section 18:	NE/4 and S/2
Section 19:	All
Section 20:	All
Section 21:	SW/4, W/2 SE/4, SE/4 SE/4
Section 28:	All

Section 29:	All
Section 30:	All
Section 31:	All
Section 32:	All
Section 33:	W/2, NE/4, W/2 SE/4, and NE/4 SE/4

73

- (b) to expand the injection authority to include new wells in the quarterquarter sections identified on Exhibit A to the Application and the existing producing or temporarily abandoned wells identified on Exhibit B to the Application;
- (c) to confirm that the well limitation for quarter-quarter sections set forth in NMAC 19.15.15.9(A) does not apply to active tertiary recovery projects, such as the North Hobbs Unit project;
- (d) to grant an exception to NMAC 19.15.13(A) (unorthodox well locations) to allow wells to be closer than 10 feet to a quarter-quarter section line or subdivision inner boundary within the North Hobbs Unit area;
- (e) to grant an exception to the notice requirements set forth in NMAC 19.15.26.8.C and 19.15.26.8.F to allow for administrative approval of additional injection wells in the expanded North Hobbs Unit area without notice and hearing;
- (f) to provide that for any injection well covered by this application that does not commence injection within 5 years after approval of this request, Oxy may submit within a period no more than twelve months and no less than sixty days before injection operations commence in the well either (i) a statement certifying that there have been no substantive changes to the information furnished in support of this application concerning the status or construction of any well that penetrates the injection interval within the one half (1/2) mile area of review around the injection well; or (ii) a statement describing any substantive changes;
- (g) to eliminate the existing limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil and to provide that no limiting gas-oil ratio or oil allowable applies to this expanded enhanced oil.recovery project;
- (h) to modify the packer setting depth required by R-6199-B Ordering Paragraph (3) to allow for the packer to be set anywhere above the uppermost injection perforations or casing shoe, provided the packer is set below the top of the Grayburg Formation;

- to provide a five-year frequency for mechanical integrity tests for temporarily abandoned wells equipped with real-time pressure monitoring devices pursuant to NMAC 19.15.25.13.E; and
- to certify the approved expansion of the tertiary recovery project for the recovered oil tax rate pursuant to the New Mexico Enhanced Oil Recovery Act, Sections 7-29A-1 to 7-29A-5 NMSA 1978 (Laws 1992, Chapter 38, Section 1 through 5) ("Recovery Act") and the rules of the Commission, 19.15.6 NMAC ("Rules").

6. At the hearing, upon the request of Oxy, the Commission adopted and took notice of the record from Case No. 14981, which resulted in Order No. R-4934-F approving a tertiary recovery project in the adjacent South Hobbs Project Area. The Commission also noted that several persons had filed written notices of appearance in this proceeding including Cornelia England, Gerald Carl Golden, Sharon Aileen Mehs. (Lee) and Thomas R. Mehs.

7. Oxy presented five witnesses in support of its Application: Jerad Brockman, Oxy's project manager with expertise in oil and gas production engineering; Randy Stillwell, a senior geologic advisor for Oxy with expertise in petroleum geology; Scott Hodges, Oxy's operations supervisor; Kelley Montgomery, Oxy's regulatory consultant with expertise in oil and gas production engineering; and Pat Sparks, Oxy's petroleum landman with expertise in petroleum land matters. Oxy's witnesses provided testimony and presented exhibits addressing the following topics:

- (a) Oxy's current operations and facilities within the Phase I area of the North Hobbs Unit and the planned expansion of gas injection operations;
- (b) The injection and production well patterns in the expanded Phase I Area, the need to exceed four wells per forty acre spacing unit, and the potential need to locate wells closer than ten feet to the guarter-guarter section lines;
- (c) The capital costs and projected timeline for installation of key components of the expansion of gas injection in the Phase I area;
- (d) The production history of the North Hobbs Unit and the additional oil anticipated from the Phase I area expansion project;
- The need for additional flexibility in the packer setting depth than what is currently allowed by Order No. R-6199-B;
- (f) The geology underlying the North Hobbs Unit, the location of the fresh water zones and the impermeable barriers that exist between the injection interval and the fresh water zones;

- (g) The gas injection facilities and pressure control devices Oxy utilizes in the Phase I area;
- (h) The supervisory control and data acquisition (SCADA) system Oxy utilizes to provide real time monitoring of pressures, temperature, water content, H2S levels and gas content in the North Hobbs Unit;
- (i) How Oxy monitors for H2S releases in the existing and proposed expanded Phase I area;
- (j) Oxy's mechanical integrity program for the design, engineering, construction and maintenance of CO2 and produced gas injection facilities for enhanced oil recovery projects like the North Hobbs Unit;
- (k) The NACE Standard MR0175 set forth in NMAC 19.15.11.14 and Oxy's compliance with that standard for the injection facilities in the existing and proposed expanded Phase I Area;
- The additional corrosion inhibition and mitigation efforts Oxy will utilize for the installation, construction and maintenance of the injection facilities in the proposed expanded Phase I Area;
- (m) Oxy's downhole corrosion mitigation efforts, including the use of corrosion resistant tubing, packers and inert packer fluid in the annulus of wells in the existing and proposed expanded Phase I Area;
- (n) The time frame for mechanical integrity tests for temporarily-abandoned wells under NMAC 19.15.25.12 and the absence of a need for more frequent testing for wells equipped with real-time pressure monitoring devices;
- (o) The location of existing gas injection wells in the Phase I Area and the proposed locations for the expansion efforts;
- (p) The condition of the existing injection wells and design plans for additional injection wells in the Phase I Area;
- (q) Oxy's plans to add additional cement behind the production casing across the fresh water zone in the North Hobbs Unit Well No. 231 (API No. 30-025-07545) in the SE/4 NW/4 (Unit F) of Section 33 of Township 18 South, Range 38 East, prior to using this well for gas injection;
- (r) The area of review analysis conducted by Oxy and the conditions of the wells within the area of review;

- (s) The extensive knowledge of the wells within the area of review, the amount of time and effort devoted to the area of review analysis, and the absence of a need to update the area of review analysis for any injection wells that commence injection over the next five years;
- (t) The methodology, time frame and effort involved to ascertain the parties entitled to notice of the hearing on Oxy's application; and
- (u) The parties notified of the hearing either by certified mail or by newspaper publication.

8. The Division's Environmental Bureau has approved a hydrogen sulfide contingency plan that covers the North Hobbs Unit Area.

9. The geologic evidence establishes the following with respect to the Grayburg and San Andres formations underlying the North Hobbs Unit :

- (a) These formations consist of a layered, anticlinal structure that acts as a natural trapping mechanism for oil, as well as any injected fluids.
- (b) These formations are separated from the fresh water zones by over 3,500 feet.
- (c) The upper portion of the Grayburg formation consists of 150 to 200 feet of impermeable anhydrite and limestone.
- (d) Various additional layers of impermeable anhydrite, salt, shale and limestone exist between these injection formations and the fresh water zones.
- (e) No geologic faults or other natural means exist in this area by which injected fluids could communicate with the shallower fresh water zones.

10. With respect to the existing wells and the proposed injection wells within the area of review for the expanded Phase I Area of the North Hobbs Unit, the evidence establishes that:

(a) The existing injection wells in the expanded Phase I Area of the North Hobbs Unit are sufficiently cased and cemented to prevent the migration of injection fluids out of the proposed injection interval. Nonetheless, Oxy intends to add additional cement behind the production casing across the fresh water zone for the North Hobbs Unit Well No. 231 (API No. 30-025-07545) in the SE/4 NW/4 (Unit F) of Section 33 of Township 18 South, Range 38 East, prior to using this well for gas injection.

> (b) Oxy's design for additional injection wells in the expanded Phase I Area of the North Hobbs Unit will provide sufficient casing and cement to prevent the migration of injection fluids out of the proposed injection interval.

11. The evidence demonstrates it is prudent to expand the geographic area for the tertiary recovery operations in the Grayburg and San Andres formations underlying the North Hobbs Unit as proposed by Oxy and that expansion of the Phase I Area of the North Hobbs Unit will result in the recovery of additional oil that may otherwise not be recovered and wasted.

12. The evidence presented to the Commission demonstrates that Oxy's proposed expansion of the tertiary recovery operations in the Grayburg and San Andres formations underlying the North Hobbs Unit will not pose an unreasonable threat to groundwater, the public health or the environment.

13. Oxy's request to expand the geographic area for the injection of CO2, water, and produced gases in the North Hobbs Unit should be approved.

14. The well limitation for quarter-quarter sections set forth in NMAC 19.15.15.9(A) does not apply to active tertiary recovery projects and Oxy should be allowed to locate wells closer than 10 feet to a quarter-quarter section line or subdivision inner boundary within the North Hobbs Unit.

15. Based on the extensive area of review analysis performed by Oxy, and the previous reviews conducted by Oxy and the Division in connection with previous applications to expand the injection authority in the Phase I Area of the North Hobbs Unit, the Commission finds it is unnecessary to update the existing area of review analysis for a period of five years. However, if any well commences injection operations more than five years after the date of this order, Oxy should submit a statement to the Division that there have been no substantive changes to the area-of-review information submitted, or a statement describing any substantive changes.

16. Pursuant to NMAC 19.15.25.13.E, and based on the evidence presented on Oxy's SCADA system and proposed real time pressure monitoring devices, the Commission finds it is appropriate to conduct mechanical integrity tests on temporarily-abandoned wells equipped with real-time pressure monitoring devices once every five years.

17. The geologic and other evidence presented demonstrates Oxy should be allowed to set packers in injection wells in the North Hobbs Unit anywhere above the uppermost injection perforations or casing shoes, so long as the packer is set below the top of the Grayburg formation.

7 ·

18. With respect to Oxy's request that its proposed expanded injection authority qualify for the recovered oil tax rate pursuant to the New Mexico Enhanced Oil Recovery Act, the evidence establishes that:

- (a) Oxy's planned enhanced oil recovery project in the expanded Phase I Area of the North Hobbs Unit should result in the recovery of an additional 54 million barrels of oil that may otherwise not be recovered, thereby preventing waste.
- (b) The proposed expanded Phase I Area of the North Hobbs Unit has been depleted to the point that it is prudent to apply enhanced recovery techniques to maximize the ultimate recovery of crude oil;
- (c) The application is economically and technically reasonable and has not been prematurely filed; and
- (d) The proposed tertiary recovery project meets all of the criteria for certification as a qualified "enhanced oil recovery project" under the Recovery Act and the Rules. NMSA 1978, Section 7-29A-4; NMAC 19.15.6.8.E.

19. The proposed tertiary recovery project in the expanded Phase I Area of the North Hobbs Unit will prevent waste, protect correlative rights, and should be approved with certain conditions.

#### THE COMMISSION CONCLUDES THAT:

1. The Commission is empowered to regulate and permit the injection of natural gas or of any other substance into any pool in this state for the purpose of repressuring, cycling, pressure maintenance, secondary or any other enhanced recovery operations. NMSA 1978, Section 70-2-12(B)(14). The Commission has a further statutory duty to prevent waste and protect correlative rights. NMSA 1978, Section 70-2-11(A).

2. Oxy has provided substantial evidence to support the approval of the authority to inject CO2, and produced water and produced gases into the North Hobbs Project Area subject to the conditions provided in this Order, which conditions are necessary to prevent waste and protect correlative rights and public health and the environment.

3. The Commission and the Division have the authority to certify "enhanced recovery projects" that are eligible for a "recovered oil tax rate" under the Enhanced Oil Recovery Act, NMSA 1978, Sections 7-29A-1 to -5 (1992) and under the Rules, 19.15.6 NMAC. The North Hobbs Grayburg-San Andres Unit Pressure Maintenance Project, as described by this Order, meets the requirements for certification as an enhanced recovery project and a tertiary recovery project under the Recovery Act and the Rules. The North

Hobbs Project Area shall be designated as the area to be affected by the enhanced recovery project.

### **IT IS THEREFORE ORDERED THAT:**

(1) The provisions of this Order shall govern the tertiary recovery project described herein. The provisions of Orders No. R-6199-B, R-6199-C, R-6199-D and R-6199-E remain applicable to the ongoing operations in the North Hobbs Unit, except to the extent that they are inconsistent with this Order.

(2) Oxy is authorized to expand the geographic area of the current tertiary recovery project in the Phase I Area of the North Hobbs Unit by the injection of CO2, water, and produced gases into the Grayburg and San Andres formations underlying the following acreage:

#### TOWNSHIP 18 SOUTH, RANGE 37 EAST, NMPM

Section 13:	W/2, SE/4
Section 14:	All ·
Section 23:	All
Section 24:	All .
Section 25:	All
Section 26:	E/2NE/4, NW/4 NE/4
Section 36:	E/2, E/2 NW/4

#### TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM

Section 17:	S/2 NW/4, SW/4
Section 18:	NE/4 and S/2
Section 19:	All
Section 20:	All
Section 21:	SW/4, W/2 SE/4, SE/4 SE/4
Section 28:	All
Section 29:	All
Section 30:	All
Section 31:	All
Section 32:	All
Section 33:	W/2, NE/4, W/2 SE/4, and NE/4 SE/4

(3) The injection of CO2, water and produced gases is authorized for the wells and locations identified on Exhibits "A" and "B" attached to this Order. Application for approval of additional injection wells in the expanded Phase I Area of the North Hobbs Unit shall be filed in accordance with NMAC 19.15.26.8 and may be approved administratively by the Division Director without notice and hearing.

(4) For any injection well or location identified on Exhibits "A" or "B" to this Order in which tertiary injection operations commence more than five years after the date of this Order, the operator shall submit to the Division either: (i) a statement certifying that there have been no substantive changes in the information furnished in support of the

subject application concerning the status or construction of any well that penetrates the injection interval within the one half (1/2) mile area of review around the injection well; or (ii) a statement describing any substantive changes. This statement shall be submitted to the Division's Santa Fe office within a period no more than twelve months and no less than sixty days before injection operations commence in the well.

(5) The well limitation for quarter-quarter sections set forth in NMAC 19.15.15.9(A) does not apply to active tertiary recovery projects and Oxy is authorized to locate wells closer than 10 feet to a quarter-quarter section line or subdivision inner boundary within the North Hobbs Unit.

(6) No limiting gas oil ratio or oil allowable applies to this enhanced oil recovery project.

(7) The injection wells or pressurization system within the expanded Phase I Area of the North Hobbs Unit shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than:

1100 psig for injection of water;

1250 psig for injection of CO2; and

1770 psig for injection of produced gases.

(8) The Division Director may administratively authorize an increase in surface injection pressure upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

(9) The operator shall take all necessary steps to ensure that the injected gases and fluids enter only the Grayburg and/or San Andres formations and are not permitted to escape to other formations or to the surface from injection, production, or plugged and abandoned wells.

(10) A one-way automatic safety value shall be installed at the surface of all injection wells to prevent flow-back of the injected gas during an emergency, start-up or shut-down operations.

(11) Injection shall be accomplished through fiberglass-lined tubing and a nickel plated packer. The packer shall be set as close as practical to the uppermost injection perforations or casing shoe (of any open hole completion), so long as the packer set point remains below the top of the Grayburg formation.

(12) The casing-tubing annulus shall be filled with an inert packer fluid containing biocide and corrosion inhibitors. A gauge or approved leak-detection device shall be attached to the annulus in order to determine leakage in the casing, tubing or packer.

(13) The operator shall use a special type of cement on all new injection wells that is designed to withstand the corrosive environment. The cement design shall contain

more than three percent (3%) tricalcium aluminate (C3A) in this High Sulfate Resistance (HSR) environment.

(14) The operator is not required to run a cement bond log on a producing well each time the rods and/or tubing are pulled from the well. However, prior to placing any well on injection, a cement bond log shall be run on said well and copies of all cement bond logs shall be sent to the Division's Hobbs District Office. If any well is found to have inadequate casing cement bond, such measures as may be necessary to prevent leakage or migration of fluids within the wellbore shall be taken before placing the well on injection.

(15) Prior to commencing injection operations, the casing in each of the injection wells within the expanded Phase I Area of the North Hobbs Unit shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

(16) A mechanical integrity test shall be conducted on all injection wells once every two years.

(17) Pursuant to NMAC 19.15.25.13.E, a mechanical integrity test shall be conducted on all temporarily-abandoned wells equipped with real-time pressure monitoring devices once every five years.

(18) Injection operations shall be conducted in a closed loop system, and the trucking of fluids is not allowed.

(19) Oxy shall not commence gas injection operations in the North Hobbs Unit Well No. 231 (API No. 30-025-07545) in the SE/4 NW/4 (Unit F) of Section 33 of Township 18 South, Range 38 East, until Oxy adds additional cement behind the production casing across the fresh water zone and provides a cement bond log to the Division's Hobbs District office.

(20) The operator shall immediately notify the supervisor of the Division's Hobbs District Office of the failure of any tubing, casing or packer in any of the injection wells, or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the project area, and shall promptly take all steps necessary to correct such failure or leakage.

(21) Oxy shall maintain recorded data from its SCADA system for the North Hobbs Unit for inspection by the Division for a reasonable period of time to be determined and agreed upon through consultation between Oxy and the Division's Hobbs District Office.

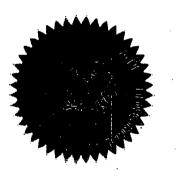
(22) The hydrogen sulfide contingency plan for the North Hobbs Unit shall be reviewed and amended as necessary pursuant to NMAC 19.15.11.9.F.

The North Hobbs Grayburg-San Andres Unit Pressure Maintenance (23)Project is hereby certified as an enhanced oil recovery project and as a tertiary recovery project pursuant to the Recovery Act and Rules, and the expanded Phase I Area of the North Hobbs Unit is designated as the area to be affected by the enhanced oil recovery project. To be eligible for the recovered oil tax credit, the operator shall advise the Division of the date and time CO2 injection commences within the expanded Phase I Area and at that time the Division will certify the project to the New Mexico Taxation and Revenue Department.

(24) At such time as a positive production response occurs, and within seven years from the date the project was certified to the New Mexico Taxation and Revenue Department, the applicant must apply to the Division for certification of a positive production response pursuant to the Recovery Act, NMSA 1978, Section 7-29A-3 and NMAC 19.15.6.8.E. This application shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the recovered oil tax rate. The Division may review the application administratively or set it for hearing. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the recovered oil tax rate. Pursuant to NMAC 19.15.6.8.F, Oxy must also report annually to the Division to confirm that the project remains a viable enhanced oil recovery project.

(25) Jurisdiction of this case is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on this 22nd day of May, 2014.



STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

ROBERT BALCH, Member

WARNELL, Member

JAMI BAILEY, Chair

SEAL

					xhibit A				
List of Proposed Project Injectors by Qtr/Qtr Section									
			Surface	Location Township &	Faatage				
Well Name	API Number	Section	Unit Letter	Range	Location	Injection Interval	Proposed injectant		
TBD	TAD	14		18-5:37-E	TBO	3698' - 4500'	Produced Gas/CO2/Water		
TBD	180	14	8	18-5 ; 37-E	тво	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TED	14	c c	18-5; 37-6	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBO	14	0	18-5; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
180	TAD	14	E	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	14	F	18-5; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TED	180	14	G	18-5 ; 37-€	TED	3698 + 4500	Produced Gas/CO2/Water		
	180	14			TBD	3698' - 4500'	Produced Gas/CO2/Water		
180	180	14	н.	18-5; 37-E	TED	3698' - 4500'	Produced Gas/CO2/Water		
180		14		18-5;37-E 18-5;37-E	TBD	3598*+4500	Produced Gas/CO2/Water		
TBD	TBD		<u> </u>		TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBO	TBD	14	ĸ	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBO	TBD	14	L	18-5 ; 37-E			i		
TBD	TBD	14	M	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	14	N	18-5;37-E	TEO	3698' - 4500'	Produced Gas/CO2/Water		
160	TBD	14	0	18-5 ; 37-E	TBÔ	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	14 .	P.	18-5 : 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
. 180	TBD	23	· A	18-S : 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	23	6	18-S: 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBO	TBD	23	C	18-5:37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TRD	23	D	18·5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TED	TBD	23	E	18-5; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TSD	TBD	23	F	18-S; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TOD	23	G	18-5;37-€	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	23	н	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBO	TBD	23	1	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	· TBD	23		18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	23	ĸ	18·5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	23	L L	18-S; 37-E	TBD	3698' • 4500'	Produced Gas/CO2/Water		
TBD	TBD	23	м	18-S, 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	23	N	18-S ; 37-E	TBD	3698 4500	Produced Gas/CO2/Water		
TBD	TBD	23	0	18-5 ; 37-E	· TBD	3698 - 4500	Produced Gas/CO2/Water		
TBD	TBÛ	23	P	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBO	26	A	18-5;37-E	TED.	3698' - 4500'	Produced Gas/CO2/Water		
TEQ	760	26	8	· 18-5; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	780	26	н	18+5;37-€	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	13	c	18-5 : 37-E	TBD -	3698' - 4500'	Produced Gas/CO2/Water		
<b>TBD</b>	TBD	13	D	18-5 : 37-6	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	13	Ē	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	13		18-5 : 37-E	TED	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	11	+	18-5 ; 37 E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
* TBD	TBD	13.		18-5;37-€	TED	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	13	+	18-5; 37-E	TED	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	13	<u>  .</u>	18-5 ; 37-E	+	3698 - 4500	Produced Gas/CO2/Water		

Page 1 of 4

ť,

t of Proposed	Project Injectors	hy Otr.	Otr Section

Exhibit A List of Proposed Project Injectors by Qtr/Qtr Section									
	·····	<u> </u>	Surface	Location	1				
Well Name	API Number	Section	Unit Letter	Township & Range	Footage Location	Injection Interval	Proposed Injectant		
TBO	TBD	13	м	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBO	18D	13	N	18-5;37-E	TBD	3698' · 4500'	Produced Gas/CO2/Water		
TBO	180	13	0	18-5;37-E	TBO	3698' - 4500'	Produced Gas/CO2/Water		
 T8D	180	13	P	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	180	24.	A	18-5 ; 37-E	TBO	3698' - 4500'	Produced Gas/COZ/Water		
TBO	TBD	24	В	18-5;37-E	TBO	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	24	С	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	180	24	· 0	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBO	180	24	E	18·S ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TED	160	24	F	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	180	24	G	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	<b>1</b> 'BO	24	н	18-5 ; 37-E	TBD	3698 4500	Produced Gas/CO2/Water		
TBD	<b>1/80</b>	24	1	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBO	24	1.	18-5;37-E	T60	3698' 4500'	Produced Gas/CO2/Water		
TBD	180	24	ĸ	18·S ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	180	24	L	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBO	180	24	M	18-5; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	24	N	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	, 18D	24	0	18-5 ; 37-E	T8D	3698' - 4500'	Produced Gas/CO2/Water		
TBD	180	24	P	18-S ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	25	•	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TED	TBD	25	B	18-5; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	T80	25	C	18-S; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	180	25	D	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	18D	25	E	18-5;37-E	TBD	3698 - 4500	Produced Gas/CO2/Water		
TBD	180	25	F	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	18D	25	G	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	16D	25	н	18-5; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBO	180	25	1	18-5:37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBO	180	25	- J	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TED	25	K	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CD2/Water		
T80	160	25	ι···	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
T8D	TBD	25	м	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	25	N	18-S ; 37-E	T80	3698' - 4500'	Produced Gas/CO2/Water		
T80	TBD	25	0	18-S; 37-E	TBD	3598' - 4500'	Produced Gas/CO2/Water		
T80	TBD	25	P	18-5;37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	180	36	. А	18-5;37-E	TBO	3698' - 4500'	Produced Gas/CO2/Water		
TED	TBO	36	8	18-S ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	36	¢.,	18-5 ; 37-E	TBD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	36	F	18-5 ; 37-E	T80	3698' - 4500'	Produced Gas/CO2/Water		
TBO	1'80	36	G	18-5;37-£	TBD	3698' - 4500'	Produced Gas/CO2/Water		
T80 🖉	TBD	36	н	18-5 ; 37-E	TaD	3698' - 4500'	Produced Gas/CO2/Water		
TBD	TBD	36	1	18-5;37-E	TBD	· 3698' · 4500'	Produced Gas/CO2/Water		

Page 2 of 4

.

List of Proposed Project Injectors by Qtr/Qtr Section								
			Surface	Location		•	· ·	
Well Name	API Number	Section	Unit Letter	Township & Footage Range Location		injection Interval	Proposed injectant	
189	TBD	. 36	7	18-5 ; 37-€	T80	3698' - 4500'	Produced Gas/CO2/Wal	
180	TBD	18	м	18-5;38-6	TBD	3658' - 4500'	Produced Gas/CO2/Wat	
TBD	TBD	18	N'	18-5; 38-E	160	3698' - 4500'	Produced Gas/CO2/Wat	
TBD	TBD	18	0	18-5;38-€	TBD	3698' - 4500'	Produced Gas/CO2/Wat	
TBD	180	18	P	18-5:38-E	TBD	3698' - 4500'	Produced Gas/CO2/Wat	
TBD	TBO	19	A	18-5 ; 38-E	TBD	3698' - 4500'	Produced Gas/CO2/War	
TBO	TBD	19	8	18-5 38-6	TBD	3698' - 4500'	Produced Gas/CO2/Wat	
TBD	TBD	19	c	18-5 : 38-E	TBO	3698' - 4500'	Produced Gas/CO2/Wal	
790	TBD	19	D	18-5 : 38-E	тво	3698' - 4500'	Produced Gas/CO2/Wat	
TBD	TED	19		18-5 ; 38-E	TBO	3698' - 4500'	Produced Gas/CO2/Wat	
TBD	780	19		18-5 : 38-E	TBD	3698' - 4500'	Produced Gas/CO2/Wat	
TBD	TBO	19	G	18-5 ; 38-E	TSD	3698' - 4500'	Produced Gas/CO2/Wat	
TêD	TBD	19	н	18-5;38-E	TRD	3698 - 4500	Produced Gas/CO2/Wat	
TBD	TED	19	к К	18-5;38-C	TED	3698' - 4500'	Produced Gas/CO2/Wat	
					TRD	3698' - 4500'	Produced Gas/CO2/Wat	
TED	TBD	19	L	18-5;38-E	TBD			
TOD	TBD	30	D	18-5 ; 38-F		3698' - 4500'	Produced Gas/CO2/Wat	
TBO	TBD	30	£	18-5 ; 38-E	TBD	3698' - 4500'	Produced Gas/CO2/Wat	
TOD	TBD	30	F	18·S ; 38·E	TBD	3698' - 4500'	Produced Gas/CO2/Wat	
780	18D	30		18-5 ; 38-E	T80	3698' - 4500'	Produced Gas/CO2/Wat	
TBD	TBD	30	· · · · ·	18-5; 38-E	TBD	3698' - 4500'	Produced Gas/CO2/Wat	
180	TBD	30	K	18-S ; 38-E	TED	3698' - 4500'	Produced Gas/CO2/Wat	
TBD	160	30	L	18-S ; 38-E	TBD	3698' - 4500'	Produced Gas/CO2/Wat	
780	TBD	30	м	18-5 ; 38-E	TBD	3698' - 4500'	Produced Gas/CO2/Wal	
TBD	TBD	30	N	18-5 ; 38-E	TBD	3698' - 4500'	Produced Gas/CO2/Wat	
780	TBD	30	0	18-S; 38-E	TBD ·	3698' - 4500'	Purchased CO2/Wate	
TBD	TBD	30	P	18-5 ; 38-E	TBD	3698' - 4500'	Purchased CO2/Wate	
760	780	31	A	18-5 ; 38-E	780	3698' - 4500'	Purchased CO2/Wate	
TBO	TBD	31	B	18-S ; 38-E	TBD	3698' - 4500'	Purchased CO2/Water	
TBD	TBD	31	C	18-5 ; 38-E	TSD	3698' - 4500'	Produced Gas/CO2/Wat	
TBD	TBD	31	D	18-5 : 38-E	TBD	3698' - 4500'	Produced Gas/CO2/Wat	
TRO	TBD	31	E	18-S ; 38-E	TBD	3698' - 4500'	Produced Gas/CO2/Wal	
TED	TBD	31	1	18-S ; 38-E	TBD	3698' - 4500'	Produced Gas/CO2/Wat	
TED	TBD	31	6	18-5 : 38-E	TBD	3698' - 4500'	Purchased CO2/Water	
TBD	TBD	31	н	18-5 ; 38-F.	TBD	3698' - 4500'	Purchased CO2/Water	
TBD	TBD	31	1	18-5 ; 38-E	18D	3698' - 4500'	Purchased CO2/Wate	
TED	TBD	31	1	18-5;38-E	TBO	3698' - 4500'	Purchased CO2/Wate	
TBO	TED	31	ĸ	18-5 ; 38-E	TBD	3698' - 4500'	Produced Gas/CO2/Wa	
TBD	TED	31	·	18-5 ; 38-E	TBD	3698' 4500'	Produced Gas/CO2/Wa	
TBD	TBD	31	M	18-5:38-E	TBD	3698' - 4500'	Purchased CO2/Wate	
TBO	TBD	31	N N	18-5 ; 38-E	TBD	3698' - 4500'	Purchased CO2/Wate	
TRO	TBD	31	0	18-5; 38-E	TBD	3698' - 4500'	Purchased CO2/Wate	
TRD	TBD	31		18-5; 38-E	TBD	3598' - 4500'	Purchased CO2/Wate	
Tap '	TED	17	E	18-5; 38-E	TBD	3698' - 4500'	Purchased CO2/Wate	

ъ с с

Page 3 of 4

. Se

÷>,

:

			List of Prop	-	Exhibit A St Injecto	rs by Qtr/Qtr Section	
			Surface	Location			
Well Name	APi Number	Section	Unit Letter	Township & Range	Footage Location	injection interval	Proposed Injectant
and with the		沃纳美国科学	1417.14.14.14	WWW PUNCTU	and real Al	PERSONAL AND A DESCRIPTION OF THE	Secondres & Constitution of the
TBD	TBD	17	ĸ	18-5 ; 38-E	TBD	3698' - 4500'	Purchased CO2/Water
TBD	TBD	17.	· · · ·	18-5 ; 38-E	78D	3698' - 4500'	Purchased CO2/Water
TBD	TBD	17	M	18-5 ; 38-E	TBD	3698' - 4500'	Purchased CO2/Water
TBD	TBD	17	N	18-5;38-E	TBD	3698' - 4500'	Purchased CO2/Water
`TBD	TBD	20	C	18-5 ; 38-E	TBD	3698' - 4500'	Purchased CO2/Water
TaD	TBO	20	D	18-5 ; 38-E	TBD	3698' - 4500'	Produced Gas/CO2/Water
TBO	TØD	20	E	18-5;38-E	TSD -	3698' - 4500'	Produced Gas/CO2/Water
TOD	TBD	20	F	18-5 ; 38-E	TBD	3698' - 4500'	· Purchased CO2/Water
TBD	TBD	20	L	18-5;38-E	TBD	3698' - 4500'	Produced Gas/CO2/Water
NHU-29A	TBD	29		18-5 ; 38-E	760	3698' - 4500'	Purchased CO2/Water
NHU-28A	TBD	28	ĸ	18-5 ; 38-E	TBD	3698' - 4500'	Purchased CO2/Water
NHU-288	TBD	28	ι	18-5 : 38-E	TBO	3698' - 4500'	Purchased CO2/Water

• •

r Page 4 of 4

----- Ť.

.

Exhibit B List of Proposed Project Injectors (Existing Wells)

				Surface Loca	ition			•
Well Name	API Number	Section	Unit Letter	Township & Range	Footage Location	Current Status	injection Interval	Proposed Injectant
NHU 28-231	30-025-07421	28	ĸ	18-5 ; 38-E	1325' Fsl & 1325' FWL	Water Injector	3698' - 4500'	Purchased CO2/Wate
NHU 28-232	30-025-28882	28	×	18-5 ; 38-E	2300 FSL & 1350 FWL	Water Injector	3698' - 4500'	Purchased CO2/Wat
NHU 33-422	30-025-28268	33	н	18-5 ; 38-E	2181 FNL & 498 FEL	Water Injector	3698' - 4500'	Purchased CO2/Wate
NHU 33-432	30-025-28269	33	1	18-5 ; 38-E	1842 FSL & 1029 FEL	Water Injector	3698' - 4500'	Purchased CO2/Wat
NHU 32-431	30-025-07537	32	1	18-5 ; 38-E	2310 FSL & 330 FEL	Water Injector	3698' - 4500'	Purchased CO2/Wat
NHU 32-432	30-025-26974	32		18-5 ; 38-E	1400 FSL& 1300 FEL	Water Injector	3698' - 4500'	Purchased CO2/Wat
NHU 32-132	30-025-27139	32	L	18-5 ; 38-E	1400 FSL & 1300 FWL	Water Injector	3698' - 4500'	Purchased CO2/Wat
NHU 32-142	30-025-28265	32	м	18-5;38-E	610 FSL & 1210 FWL	Water Injector	3698' - 4500'	Purchased CO2/Wat
NHU 32-341	30-025-07539	32	0	18-5 ; 38-E	330 FSL & 2330 FEL	Water injector	3698' - 4500'	Purchased CD2/Wat
NHU 32-342	30-025-28266	32	0	18-5 ; 38-E	457 F5L & 1437 FEL	Water Injector	3698' - 4500'	Purchased CO2/Wat
NHU 33-342	30-025-28267	33	0	18-5 ; 38-E	125 FSL & 2730 FWL	Water Injector	3698' - 4500'	Purchased CO2/Wate
NHU 33-441	30-025-07498	31	ρ	18-5 ; 38-E	330 FSL & 330 FEL	TA	3698' - 4500'	Purchased CO2/Wat
NHU 33-142	30-025-28411	33	м	18-5 ; 38-E	1250 FSL & 185 FWL	Water Injector	3698' - 4500'	Purchased CO2/Wate
NHU 33-312	30-025-29199	33	В	18-5 ; 38-E	151 FNL& 1702 FEL	Water Injector	3698' - 4500'	Purchased CO?/Wate
NHU 33-211	30-025-07564	33	C	18-5,38-E	330 FNL & 2310 FWL	Water Injector	3698' - 4500'	Purchased CO2/Wate
NHU 33-212	30-025-29026	33	C	18-5 ; 38-E	205 FNL & 1420 FWL	Water Injector	3698' - 4500'	Purchased CO2/Wate
1 . 33-222	30-025-26975	33	F	18-5 ; 38-E	1520 FNL & 1470 FWL	Water Injector	3698' - 4500'	Purchased CO2/Wate
N 33-322	30-025-27169	33	G	18-5 ; 38-E	1435 FNL & 1670 FEL	Water Injector	3698' • 4500'	Purchased CO2/Wat
NHU 33-323	30-025-28951	33	G	18-5 ; 38-E	2525 FNL & 1453 FEL	Produce:	3698 4500	Purchased CO2/Wate
NHU 33-534	30-025-34373	33	J	18-5 ; 38-E`	2415 FSL & 2200 FEL	Water Injector	3698' - 4500'	Purchased CO2/Wat
NHU 33-231	30-025-07545	33	F	18-5 ; 38-E	2310 FSL & 1320 FWL	Water Injector	3698 4500	Purchased CO2/Wat
NHU 33-232	30-025-27169	33	ĸ	18-5 ; 38-E	1435 FNL & 1670 FEL	Water Injector	3698 4500	Purchased CO2/Wat

I/ ///		
C-108 Review Checklist: Received Add. Request:	·	
C-108 Review Checklist: Received Add. Request: ORDER TYPE: WFX / OMX SWD Number: Order Date:		
Well No. /// Well Name(s): WURTH HUBBS C-1	SA	-1+954-F
Well No. /// Well Name(s): <u>WUNHL</u> <u>HUBBS</u> <u>GIT</u> API: 30-0 <u>25-07375</u> Spud Date: <u>New or C</u> 330 FAC	Id: (UIC Class I	l Primacy 03/07/1982 )
Footages 320FWC Lot or Unit 1) Sec 20 Tsp	Roe SP	E County Les
General Location: <u>Hobbs City Limits</u> Pool: <u>Sci</u>	Andres	Pool No.: 3/920
BLM 100K Map: HUBLAS Operator: Occidentel Pennim L OG		
COMPLIANCE RULE 5.9: Total Wells: 614 Inactive: 4 Fincl Assur: 06 Cor	npl. Order? Mis	5.9 OK? VDate: 10-06-24
WELL FILE REVIEWED Current Status:		<i>I</i> .
WELL DIAGRAMS: NEW: Proposed () or RE-ENTER: Before Conv. () After Conv. ()	Logs in Imaging:	
Planned Rehab Work to Well:		
Well Construction Details         Sizes (in)         Setting           Borehole / Pipe         Depths (ft)	Cement	Cement Top and Determination M ethod
Planned _or Existing _Surface 15 1/12 1 213 Stage Toc	1 \$200	Surface/CALC
Planned_or Existing _ Interm/Prod Planned_or Existing _ Interm/Prod	.500	1355 CALO
Planned_or Existing _Interm/Prod _G 19/7 _ 43/6	200	2781/CARC
Planned_or Existing_Prod/Liner 6 14 18 1 4 4 238	395	Surraco CALC
Planned_or Existing_Liner	50	3773/CALC
Planned_or Existing Liner	50 <u>Compl</u>	<u>3773/CALc</u> etion/Operation Details:
Planned_or Existing Liner	50 <u>Compl</u> Drilled TD <u>'423</u>	3773/CALC etion/Operation Details:
Planned_or Existing Liner Planned_or Existing OH / FEBF UIX//427	50 <u>Compl</u> Drilled TD <u>'423</u> NEW TD <u>4365</u>	3773/CALC etion/Operation Details: PBTD NEW PBTD
Planned_or Existing _ Liner       Planned_or Existing _ OH / FEBF       Uix//427         Planned_or Existing _ OH / FEBF       Uix//427       Injection or Confining         Injection Lithostratigraphic Units:       Depths (ft)       Injection or Confining         Adjacent Unit:       Litho.       Struc.       Por.         Confining Unit:       Litho.       Struc.       Por.	57 <u>Compl</u> Drilled TD <u>423</u> NEW TD <u>4365</u> NEW Open Hole	<u>3773/CALc</u> etion/Operation Details: PBTD NEW PBTD or NEW Perfs (
Planned_or ExistingLiner       Planned_or ExistingOH / FEFF       Use of the second sec	Compl Drilled TD <u>'42.3</u> NEW TD <u>4365</u> NEW Open Hole Tubing Size <u>2</u>	<u>3773/CALc</u> etion/Operation Details: PBTD NEW PBTD or NEW Perfs (
Planned_or ExistingLiner       Planned_or ExistingOH / FEFF       Use in the image in the ima	Compl Drilled TD <u>'42.3</u> NEW TD <u>4365</u> NEW Open Hole Tubing Size <u>2</u>	<u>ation/Operation Details:</u> <u>PBTD</u> NEW PBTD or NEW Perfs in. Inter Coated? <u>epth</u> <u>ft</u>
Planned_or ExistingLiner       Planned_or ExistingOH / FEFF       Use of the second sec	SC Compl Drilled TD <u>423</u> NEW TD <u>4365</u> NEW Open Hole Tubing Size <u>2</u> Proposed Packer De Min. Packer Depth	<u>3773/CALc</u> etion/Operation Details: PBTD NEW PBTD or NEW Perfs (
Planned_or ExistingLiner       Planned_or ExistingOH / IEFF       Ui v//y v/v         Planned_or ExistingOH / IEFF       Ui v//y v/v       Injection or Confining         Injection Lithostratigraphic Units:       Depths (ft)       Injection or Confining         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Proposed Inj Interval TOP:       Proposed Inj Interval BOTTOM:       Injection or Confining       Injection or Confining         Confining Unit:       Litho. Struc. Por.       Injection or Confining       Injection or Confining         Proposed Inj Interval BOTTOM:       Injection or Confining       Injection or Confining       Injection or Confining         Confining Unit:       Litho. Struc. Por.       Injection or Confining       Injection or Confining       Injection or Confining         Proposed Inj Interval BOTTOM:       Injection or Confining       Injection or Confining       Injection or Confining         Confining Unit:       Litho. Struc. Por.       Injection or Confining       Injection or Confining	SC Compl Drilled TD <u>42.3</u> NEW TD <u>43.65</u> NEW Open Hole Tubing Size <u>2</u> Proposed Packer De Min. Packer Depth Proposed Max. Surf	<u>BTD</u> <u>PBTD</u> <u>NEW PBTD</u> or NEW Perfs ( <u>)</u> in. Inter Coated? epthft <u>Set un;</u> (100-ft limit) <u>Set un;</u>
Planned_or ExistingLiner       Image: Constraint of the second s	<b>S</b> <b>Compl</b> Drilled TD <u>'92.3</u> NEW TD <u>9365</u> NEW Open Hole Tubing Size <u>2</u> Proposed Packer Depth Proposed Max. Surfa Admin. Inj. Press.	3773/CALc         etion/Operation Details:         PBTD         NEW PBTD         or NEW Perfs ()         in. Inter Coated?         epth ft         (100-ft limit) 7         ace Press psi         (0.2 psi per ft)
Planned_or Existing _ Liner       Planned_or Existing _ OH / FEPF       Uix//4/7/7         Planned_or Existing _ OH / FEPF       Uix//4/7/7       Injection or Confining         Injection Lithostratigraphic Units:       Depths (ft)       Injection or Confining         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Proposed Inj Interval TOP:       Proposed Inj Interval BOTTOM:       Injection or Confining       Injection or Confining         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Injection or Confining       Injection or Confining         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Injection or Confining       Injection or Confining         Proposed Inj Interval TOP:       Injection or Confining       Injection or Confining       Injection or Confining         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Injection or Confining         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Injection or Confining	SC Compl Drilled TD <u>423</u> NEW TD <u>4365</u> NEW Open Hole Tubing Size <u>2</u> Proposed Packer De Min. Packer Depth Proposed Max. Surfa Admin. Inj. Press Salado T:B:	<u>Barrow Constraints</u> <u>etion/Operation Details:</u> <u>PBTD</u> NEW PBTD or NEW Perfs ( <u>)</u> in. Inter Coated? epthft (100-ft limit) <b>P 4 n</b> ; <b>h</b> ; ace Presspsi (0.2 psi per ft) <u>NW</u> : Cliff House fm
Planned_or ExistingLiner       Planned_or ExistingOH / FEFF       UIX//YU/YU/YU/YU/YU/YU/YU/YU/YU/YU/YU/YU/YU	Compl Drilled TD <u>'92.3</u> NEW TD <u>9365</u> NEW Open Hole Tubing Size <u>2</u> Proposed Packer De Min. Packer Depth Proposed Max. Surfa Admin. Inj. Press. <u>_</u> Salado T: <u>B</u> : <u></u>	3773/CALc         etion/Operation Details:         PBTD         NEW PBTD         or NEW Perfs ()         in. Inter Coated?         epth ft         (100-ft limit) 7         ace Press psi         (0.2 psi per ft)         NW: Cliff House fm         ENT By Qualified Person ()
Planned_or Existing _ Liner       Planned_or Existing _ OH / FEBF       UIX//YL/YL         Injection Lithostratigraphic Units:       Depths (ft)       Injection or Confining         Injection Lithostratigraphic Units:       Depths (ft)       Injection or Confining         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Confining Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Proposed Inj Interval TOP:       Proposed Inj Interval BOTTOM:       Injection or Confining       Tops         Adjacent Unit:       Litho. Struc. Por.       Adjacent Unit:       Adjacent Opr.       Injection or Confining         Proposed Inj Interval BOTTOM:       Proposed Inj Interval BOTTOM:       Portase:       Portase:       Portase:         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Portase:       Portase:         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Portase:       Portase:         POTASH; R-111-P       Noticed?       Poll Ser. Ord Or WIPP Or Noticed?       Salt/         FRESH WATER:       Aquifer       Interval Solution Police:       Nax Depth       Salt/         NMOSE Basin:       L. C. Q       CAPITAN REEF: thru       Adj       No. Well	Complete State St	3 7 3 / CALc.         etion/Operation Details:         PBTD         NEW PBTD         or NEW Perfs ()         in. Inter Coated?         septh ft         (100-ft limit) 7         4 hithing         ace Press psi         (0.2 psi per ft)         NW: Cliff House fm         SNT By Qualified Person ()         ? FW Analysis
Planned_or Existing _ Liner       Planned_or Existing _ OH / FEPF       Uix//Yu/Yu/Yu/Yu/Yu/Yu/Yu/Yu/Yu/Yu/Yu/Yu/Yu	Complete Service Serv	3 773/CALc         etion/Operation Details:         etion/Operation Details:         PBTD
Planned_or Existing _ Liner       Injection Lithostratigraphic Units:       U1X//4277         Injection Lithostratigraphic Units:       Depths (ft)       Injection or Confining         Injection Lithostratigraphic Units:       Depths (ft)       Injection or Confining         Adjacent Unit:       Litho.       Struc. Por.         Confining Unit:       Litho.       Struc. Por.         Proposed Inj Interval BOTTOM:	Complete TD Complete TD Y2.3 Drilled TD Y2.3 NEW TD Y3.6.5 NEW Open Hole Tubing Size Y4 Proposed Packer Depth Proposed Max. Surfate Admin. Inj. Press Salado T: B: RO AFFIRM STATEME S within 1-Mile Radius On Lease Operate Source:	3773/CALc         etion/Operation Details:         etion/Operation Details:         PBTD
Planned_or Existing _ Liner       Injection Lithostratigraphic Units:       U1 (// (/ / / / / / / / / / / / / / / / /	Complete TD Drilled TD Drilled TD VEW TD NEW TD NEW Open Hole Tubing Size Proposed Packer Depth Proposed Max. Surfate Admin. Inj. Press Salado T:B: RO AFFIRM STATEME s within 1-Mile RadiusOn LeaseOperate T/P&A/Other	3 7 3 CALc         etion/Operation Details:         PBTD
Planned_or ExistingLiner       Image: Constraint of the con	Complete Co	3773/CALc         etion/Operation Details:         PBTD
Planned_or ExistingOH / FEPF       UIX//YU       UIX//YU       UIX//YU         Injection Lithostratigraphic Units:       Depths (ft)       Injection or Confining       Tops         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Confining Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Proposed Inj Interval BOTTOM:       Confining Unit:       Confining Unit:       Confining Unit:       Litho. Struc. Por.         Adjacent Unit:       Litho. Struc. Por.       Adjacent Unit:       Litho. Struc. Por.       Adjacent Unit:         Adjacent Unit:       Litho. Struc. Por.       Adjacent Unit:       Noticed?       Salt/         Proposed Inj Interval BOTTOM:       Confining Unit:       Struc. Por.       Adjacent Unit:       Hydrologic and Geologic Information         POTASH:       R-111-P       Noticed?       BUM Seq. Ord       WIPP () Noticed?       Salt/         FRESH WATER:       Aquifer       Imit Estime       Analysis?       Max Depth       Mo. Well         Disposal Fluid:       Formation Source(s)       Producid Hz       Analysis?       Disposal Int:       Inject Rate (Avg/Max BWPD):       Sup inferval?       Method:	S         Complement         Drilled TD       '42.3         NEW TD       '42.3         NEW TD       '42.3         NEW TD       '43.65         NEW Open Hole       '42.3         Tubing Size       2'4         Proposed Packer Depth       '42.3         Proposed Packer Depth       '42.3         Proposed Packer Depth       '42.3         Proposed Max. Surfa       Admin. Inj. Press.         Salado T:       B:         'S within 1-Mile Radius       On Lease O Opera         Source:       '1'P&A/Other         g Interval:	3773/CALc         etion/Operation Details:         PBTD
Planned_or ExistingOH / FEPF       UIX//YU       UIX//YU       UIX//YU         Injection Lithostratigraphic Units:       Depths (ft)       Injection or Confining       Tops         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Confining Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Proposed Inj Interval BOTTOM:       Confining Unit:       Confining Unit:       Confining Unit:       Litho. Struc. Por.         Adjacent Unit:       Litho. Struc. Por.       Adjacent Unit:       Litho. Struc. Por.       Adjacent Unit:         Adjacent Unit:       Litho. Struc. Por.       Adjacent Unit:       Noticed?       Salt/         Proposed Inj Interval BOTTOM:       Confining Unit:       Struc. Por.       Adjacent Unit:       Hydrologic and Geologic Information         POTASH:       R-111-P       Noticed?       BUM Seq. Ord       WIPP () Noticed?       Salt/         FRESH WATER:       Aquifer       Imit Estime       Analysis?       Max Depth       Mo. Well         Disposal Fluid:       Formation Source(s)       Producid Hz       Analysis?       Disposal Int:       Inject Rate (Avg/Max BWPD):       Sup inferval?       Method:	S         Complement         Drilled TD       '42.3         NEW TD       '42.3         NEW TD       '42.3         NEW TD       '43.65         NEW Open Hole       '42.3         Tubing Size       2'4         Proposed Packer Depth       '42.3         Proposed Packer Depth       '42.3         Proposed Packer Depth       '42.3         Proposed Max. Surfa       Admin. Inj. Press.         Salado T:       B:         'S within 1-Mile Radius       On Lease O Opera         Source:       '1'P&A/Other         g Interval:	3773/CALc         etion/Operation Details:         PBTD
Planned_or ExistingOH / FEBF       Ux//Y       U365         Injection Lithostratigraphic Units:       Depths (ft)       Injection or Confining       Tops         Adjacent Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Confining Unit:       Litho. Struc. Por.       Injection or Confining       Tops         Proposed Inj Interval BOTTOM:	Complete Co	3773/CALc         etion/Operation Details:         PBTD

Ť

dd Order Cond:

400	ERVATION .	Barren -

## C-108 Review Checklist: Area Order

Supplemental Checklist for Multiple Well Application

ORDER TYPE: WFX / PMX Number: _____

SUPPLEMENTAL PAGE _____ of _____

Relevant Hearing Order(s): _____

NULTIPLE WELL APPLICATION					
	L of TH- Well	NoWell Name	e(s): Nur	ths Hob	65 Unit 9234
API: 30-0 25-31 UI/	Spud Dat	e:	New or Old:	(UIC Class II	Primacy 03/07/1982)
$\begin{array}{c} \text{API: } 30-0 & 25 & -31 & 011 \\ & 5 & 72 & 117 & 55 & 15 \\ \hline & \hline$	M3 Fw Par	or Unit Sec 🏄	Tsp	7 Rge <u> </u>	County
WELL FILE REVIEWED O Current	states: FID	<u>۲</u> 3	2 18 5	بزد - <	
WELL DIAGRAMS: NEW: Proposed	C.	Before Conv. () After (	Conv. O Log	s in Imaging: 🗙	
Planned Rehab Work to Well:	-				
Well Construction Details	Sizes (in)	Setting		Cement	Cement Top and
Well Construction Details	Borehole / Pipe	Depths (ft)		Sx or Cf	Determination Method
Plannedor ExistingSurface	7 37 11 0		Stage Tool	950	Surren
Planned_or Existing Interm/Prod		9200		1100	Simm
Planned_or ExistingInterm/Prod		· · · · · · · · · · · · · · · · · · ·	++		
Planned_or Existing _ Prod/Liner		~			
Planned_or Existing _ Liner			Inj Length	Hydrologic Inf	ormation and AOR Well
Planned_or Existing _OH PERF	75376406		167400	Summal	ry on Coversheet
Completion/Operation Details:	Drilled TD 703	7 PBTD 7/37	NEW TD	NEW P	BTD
		Le in		WiApprove	ding ection inter
NEW Open Hole () or NEW Perfs () المرحد : عرف المراجع	) Tubing Size <u>4</u>	_ in. Coated? Prop.	Packer Depth	ft Min. E	Depth (100-ft limit)
Proposed Max. Surface Press.	psi Admin.	Inj. Press. 400	0.2 psi per ft)	ANY AREA IPI AP	PROVAL:
<i>CUty Yhous sh</i> _Specific Requirement(s) for Well:	ちーション				
	heras	Cypicas		<u> </u>	
	That The Well	No Well Name	(c). NOP	LL Hub	6 15 5 4 cm
	h. m.	NoWell Name	(s): N UM	LG Hub	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
API 30-0 2.5-3540	Soud Date	e: 9/21/2007	New or Old:	(UIC Class II	Primacy 03/07/1982)
API 30-0 2.5-3540	Soud Date	e: 9/21/2007	New or Old:	(UIC Class II	Primacy 03/07/1982)
API 30-0 2.5-3540	BISHIELS	e: 9/21/2007	New or Old:	(UIC Class II	45 ¹⁵⁵ 444 Primacy 03/07/1982) E County Leg 5 1 2 4
API : 30-0 25-3590 Footages	Status: AMA	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \end{array} \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \end{array} \\ \end{array} \\ \end{array} \end{array} \\ \begin{array}{c} \end{array} \end{array} \\ \end{array} \\ \end{array} \\ $	New or Old:	UIC Class II	Primacy 03/07/1982) E County Leg E Leg
api: 30-0 25-3540	Status: AMA	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \end{array} \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \end{array} \\ \end{array} \\ \end{array} \end{array} \\ \begin{array}{c} \end{array} \end{array} \\ \end{array} \\ \end{array} \\ $	New or Old:	UIC Class II	Primacy 03/07/1982) E County Leg E Leg
API : 30-0 2-5-354 eootages 75577555 WELL FILE REVIEWED O Current WELL DIAGRAMS: NEW: Proposed	Soud Date Status:	e: <u>4/21/207</u> Unit <u>Asec</u> 2 Before Conv. () Atter C	New or Old:	(UIC Class II Rge 35 5 in Imaging:	Primacy 03/07/1982) 5 County Leg 5 Leg
API : 30-0 2-5-354 eootages 75577555 WELL FILE REVIEWED O Current WELL DIAGRAMS: NEW: Proposed	Status: AMA	e: 4/2/202 Unit Asec 2 Before Conv. () After C Setting	New or Old:	(UIC Class II Rge 36 5 in Imaging:	Primacy 03/07/1982) E County Leg B County Leg County Leg Count
API : 30-0 25-359 Footages WELL FILE REVIEWED O Current WELL DIAGRAMS: NEW: Proposed Planned Rehab Work to Well:	Sound Date Status: A MARCE or RE-ENTER: I Sizes (in) Borehole / Pipe	e: 4/2/202 Unit Asec 2 Before Conv. (Atter C Setting Depths (ft)	New or Old:	(UIC Class II Rge 35 5 in Imaging:	Cement Top and Determination Method
API : 30-0 25-359 Footages VISCUE Contract WELL FILE REVIEWED Current WELL DIAGRAMS: NEW: Proposed Planned Rehab Work to Well: Well Construction Details	Sizes (in) Borehole //Pipe	e: <u>4/2/207</u> Vinit <u>Asec</u> 2 Before Conv. () Atter C Setting Depths (ft) 15,85	New or Old: STsp/ F Sonv. O Logs  Stage Tool	(UIC Class II Rge 36 5 in Imaging:	Cement Top and Determination Method
API : 30-0 25-359 Footages WELL FILE REVIEWED O Current WELL DIAGRAMS: NEW: Proposed Planned Rehab Work to Well: Well Construction Details Planned _or Existing _Surface	Sizes (in) Borehole / Pipe	e: 4/2/202 Unit Asec 2 Before Conv. (Atter C Setting Depths (ft)	New or Old: STsp / F sonv Logs Stage Tool	(UIC Class II Rge 36 5 in Imaging:	Cement Top and Determination Method
API : 30-0 25-359 eootages VIIII E REVIEWED O Current WELL FILE REVIEWED O Current WELL DIAGRAMS: NEW: Proposed Planned Rehab Work to Well: Well Construction Details Planned_or ExistingSurface Planned_or ExistingInterm/Prod	Sizes (in) Borehole / Pipe	e: <u>4/2/207</u> Vinit <u>Asec</u> 2 Before Conv. () Atter C Setting Depths (ft) 15,85	New or Old: STsp/ F Sonv. O Logs  Stage Tool	(UIC Class II Rge 36 5 in Imaging:	Cement Top and Determination Method
API : 30-0 25-354 eootages VIELL FILE REVIEWED Current WELL FILE REVIEWED Current WELL DIAGRAMS: NEW: Proposed Planned Rehab Work to Well: Well Construction Details Planned _or Existing Surface Planned _or Existing Interm/Prod Planned _or Existing Interm/Prod Planned _or Existing Interm/Prod Planned _or Existing Interm/Prod	Sizes (in) Borehole / Pipe	e: <u>4/2/207</u> Vinit <u>Asec</u> 2 Before Conv. () Atter C Setting Depths (ft) 15,85	New or Old: STsp/ F Sonv. O Logs  Stage Tool	(UIC Class II Rge 36 5 in Imaging:	Cement Top and Determination Method
API : 30-0 25-359 Footages VIELL FILE REVIEWED Current WELL FILE REVIEWED Current WELL DIAGRAMS: NEW: Proposed Planned Rehab Work to Well: Well Construction Details Planned _or ExistingSurface Planned _or ExistingInterm/Prod Planned _or ExistingInterm/Prod Planned _or ExistingInterm/Prod Planned _or ExistingInterm/Prod	Sizes (in) Borehole / Pipe	e: <u>4/2/207</u> Vinit <u>Asec</u> 2 Before Conv. () Atter C Setting Depths (ft) 15,85	New or Old: STsp/ F Sonv. O Logs  Stage Tool	(UIC Class II Rge 36 36 5 in Imaging: Cement Sor Cf 4 C	Cement Top and Determination Method
API : 30-0 25-354 eootages VIELL FILE REVIEWED Current WELL FILE REVIEWED Current WELL DIAGRAMS: NEW: Proposed Planned Rehab Work to Well: Well Construction Details Planned _or Existing Surface Planned _or Existing Interm/Prod Planned _or Existing Interm/Prod Planned _or Existing Interm/Prod Planned _or Existing Interm/Prod	Sizes (in) Borehole / Pipe	e: <u>4/21/207</u> Unit <u>Asec</u> 2 Before Conv. (Atter C Setting Depths (ft) <u>444 LL m LJ 4037</u> 146	New or Old:	(UIC Class II Rge 36 S in Imaging: Cement Sor Cf 9 16 16 Hydrologic Infe	Cement Top and Determination Method SUPPLICIES
API : 30-0 25-354 Footages VILL FILE REVIEWED Current WELL FILE REVIEWED Current WELL DIAGRAMS: NEW: Proposed Planned Rehab Work to Well: Well Construction Details Planned _or ExistingInterm/Prod Planned_or ExistingInterm/Prod Planned_or ExistingInterm/Prod Planned_or ExistingProd/Liner Planned_or ExistingOV/PERF	Sizes (in) Borehole / Pipe	e: <u>4/21/207</u> Unit <u>Asec</u> 2 Before Conv. () Atter C <u>Setting</u> Depths (ft) <u>44466m644037</u> <u>146</u> <u>146</u> <u>146</u>	New or Old:	(UIC Class II Rge 36 S in Imaging: Cement Sor Cf 9 16 16 Hydrologic Infe	Primacy 03/07/1982) E County Leg B County Leg Cement Top and Determination Method S LIPEL USC S LIPEL VISC Dormation and AOR Well y on Coversheet
API : 30-0 25-354 eootages VILL FILE REVIEWED Current WELL FILE REVIEWED Current WELL DIAGRAMS: NEW: Proposed Planned Rehab Work to Well: <u>Well Construction Details</u> Planned or Existing Surface Planned or Existing Interm/Prod Planned or Existing Liner Planned or Existing OF/ PERF Completion/Operation Details: VEW Open Hole Cor NEW Perfs C	Sizes (in) Borehole / Pipe	e: 9/21/202 Unit Asec 2 Before Conv. Atter C Setting Depths (ft) 1585 444 LLM L 4037 146 146 146 146 146 146 146 146	New or Old:	(UIC Class II Rge 36 S in Imaging: Cement Syor Cf 9 5 16 5 Hydrologic Infe Summar NEW P	Primacy 03/07/1982) E County Leg G County Leg Cement Top and Determination Method S LIPELIUS L S LIPELIUS L Dormation and AOR Well y on Coversheet BTD
API : 30-0 25-354 eootages 255555555555555 WELL FILE REVIEWED () Current WELL DIAGRAMS: NEW: Proposed Planned Rehab Work to Well: <u>Well Construction Details</u> Planned _or Existing <b>Surface</b> Planned _or Existing <b>Interm/Prod</b> Planned _or Existing <b>Interm</b> / <b>Prod</b> / <b>Inter</b>	Sizes (in) Borehole / Pipe 31/ 95/ Borehole / Pipe 31/ 95/ 96/ 96/ 96/ 96/ 96/ 96/ 96/ 96/ 96/ 96	e: 9/21/207 Unit Asec 2 Before Conv. Atter C Setting Depths (ft) 1585 44466mbl 403m 146 146 146 146 146 146 146 146	New or Old:	(UIC Class II Rge 36 S in Imaging: Cement Sor Cf 9 C 16 C Hydrologic Info Summai NEW P ft Min. D	Cement Top and Determination Method Surren Visc Surren Visc Surren Visc Surren Visc Surren Visc Surren Visc Surren Visc Surren Visc
API : 30-0 25-354 eootages VILL FILE REVIEWED Current WELL FILE REVIEWED Current WELL DIAGRAMS: NEW: Proposed Planned Rehab Work to Well: <u>Well Construction Details</u> Planned or Existing Surface Planned or Existing Interm/Prod Planned or Existing Liner Planned or Existing OF/ PERF Completion/Operation Details: VEW Open Hole Cor NEW Perfs C	Sizes (in) Borehole / Pipe 31/ 95/ Sizes (in) Borehole / Pipe 31/ 95/ 95/ 95/ 95/ 95/ 95/ 95/ 95/ 95/ 95/	e: 9/21/202 Unit Asec 2 Before Conv. Atter C Setting Depths (ft) 1585 444 LLM L 4037 146 146 146 146 146 146 146 146	New or Old:	(UIC Class II Rge 36 S in Imaging: Cement Sor Cf 9 C 16 C Hydrologic Info Summai NEW P ft Min. D	Cement Top and Determination Method Surren Visc Surren Visc Surren Visc Surren Visc Surren Visc Surren Visc Surren Visc Surren Visc

Form C-103

(Revised 3-55)

# NEW MEXICO OIL CONSERVATION COMMISSION MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

COMPANY Skelly Oll Com	Apany Box (Addre	<b>38 i</b> ss)	Hobbs, New He					
LEASE H.D. McKinley	WELL NO	UNIT ^{#I}	<b>*</b> _S	20	т	LAS	R	385
DATE WORK PERFORMEN	D 5/4/55 to 8/30/9	5 POOL	Hobbs	)				
This is a Report of: (Chec	k appropriate blo	ock)	Resu	lts of	Test	of Cal	sing	Shut-of
Beginning Drilling	g Operations	00	Reme	edial '	Work			
Plugging			Other	r				

Detailed account of work done, nature and quantity of materials used and results obtained.

Pulled rods and tuking. Tested 7"OD casing to 1000# and casing tested e.k.. Ran Dewell spinner survey and survey indicated water sones 4181-87' & 4201-64'. Ran 129 jts. of 5"OD casing and set at 4238'. Commented around shoe with 100 sacks. Opened DV tool at 3879' and circulated 70 sacks comment. Commented thru DV tool with 225 sacks comment. Comment-sirculated, Drilled plug and tested casing shut-off. Tested e.k., Perforated 5" OD casing 4161-63' and 4201-03' and squeesed with 100 sacks at max. pressure of 6000#. Perforated 5" OD casing 4200'-4208'. Treated new perfs.  $\sqrt{500}$  gals. M-38 acid. After pumping and testing several days, wall tested 54 bbls. oil, 360 bbls. sulphur water per day.

FILL IN BELOW FOR REMEDIAL WOR	RK REPORTS ON	LY	
Original Well Data:			1
DF Elev. 3662 TD 42381 PBD -	Prod. Int.	4040-4238' Comp	l Date 10/13/1932
Tbng. Dia 22 Tbng Depth 4238	Oil String Dia	TI 7"09Oil Strir	ng Depth 4040
Perf Interval (s) 🖷			
Open Hole Interval 4040- 4238 Prod	ucing Formation	(s) San Andres	
RESULTS OF WORKOVER:	· · · · · · · · · · · · · · · · · · ·	BEFORE	AFTER
Date of Test		5/2/55	8/30/55
Oil Production, bbls. per day		37	54
Gas Production, Mcf per day		37	39
Water Production, bbls. per day	:	271	360
Gas-Oil Ratio, cu. ft. per bbl.	,	1000	722
Gas Well Potential, Mcf per day		· · · · · · · · · · · · · · · · · · ·	•
Witnessed by J. W. George	Ske	lly Oil Company	
		(Comp	
OIL CONSERVATION COMMISSION		tify that the info and complete to	
Name	Name	· 07	Decular
Title	Position	pirt. Supt.	Summer
Date	 Company		