				12-1
Form 9160-3 (March 2012)	REGE	IVED	FORM APP OMB No. 100 Expires Octobe	04-0137
UNITED STATE DEPARTMENT OF THE	INTERIOR FED A		5. Lease Serial No. NM-9402, NM-10266, L	-6781
BUREAU OF LAND MAN	NAOEMENII		- 101 P - 111 - 70	
APPLICATION FOR PERMIT TO		ARTESIA		Te
Ia. Type of work: I DRILL REENT	TER	·	7. If Unit or CA Agreemer CA-NM124254	it, Name and No. 2
lb. Type of Well: Oil Well 🗸 Gas Well Other	Single Zone M	ultiple Zone	8. Lease Name and Well 2 Cottonwood KI Fed. Co	
2. Name of Operator YATES PETROLEUM CORPORATIO	N 170	2017	9. API Well No.	41081
3a. Address 105 South Fourth Street	3b. Phone No. (include area code,	<u> </u>	10. Field and Pool, or Explo	pratory
Artesia, NM 88210	575-748-4347		Cottonwood Creek Wol	
 Location of Well (Report location clearly and in accordance with a At surface 760' FNL & 305' FFL, Ut. Ltr. D, NWNW 	Trty State requirements.*)		11. Sec., T. R. M. or Blk.an Section 17, T16S-R25E	-
At proposed prod. zone 760' FNL & 660' FEL, Ut. Ltr. A, N	IENE			
 Distance in miles and direction from nearest town or post office* Approximately six (6) miles northwest of Artesia, New Me 	xico		12. County or Parish Eddy	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease NM-9402 - 478.81 & NM - 10266-640&L-6781-280	17. Spacin N/2 320	g Unit dedicated to this well acres	
 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 	19. Proposed Depth TVD 4865' & MD 8907'	NATION	BIA Bond No. on file IWIDE BOND #NMB000 al Bond NMB000920	434
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3545' GL	22. Approximate date work will 10/18/2012	start*	23. Estimated duration 60 days	
	10/18/2012		00 0893	
The following, completed in accordance with the requirements of Onsh 1. Well plat certified by a registered surveyor.	4. Bond to cov	er the operatio	is form: ns unless covered by an exis	ting bond on file (see
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Forest Service Office). 	n Lands, the Correct C	er the operatio /e). tification	ns unless covered by an exis	be required by the
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System 	nore Oil and Gas Order No.1, must h 4. Bond to cov Item 20 abov 5. Operator cer 6. Such other	er the operatio /e). tification	ns unless covered by an exis	be required by the
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Porest Service Office). Signature Title 	n Lands, the A such as the second sec	er the operatio /e). tification	ns unless covered by an exis	be required by the
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Forest Service Office). Signature 	n Lands, the A Such other Solution (1990) Name (Printed/Typed)	er the operatio /e). tification site specific inf	ns unless covered by an exis ormation and/or plans as may Date	e required by the
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Porest Service Office). Signature Signature Regulatory Agent Approved by (Signature) Is/ Don Peterson 	Name (Printed/Typed)	er the operatio re). tification site specific inf	ns unless covered by an exis ormation and/or plans as may Date Date n Peterson	be required by the
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Porest Service Office). Signature Signature Title Regulatory Agent Approved by (Signature) /s/ Don Peterson Title FIELD MANAGER 	ore Oil and Gas Order No.1, must H 4. Bond to cov Item 20 abov 5. Operator cer 6. Such other : BLM. Name (Printed/Typed) Cy Cowan Office CARLSB,	er the operatio re). tification site specific inf /s/ Dor AD FIELD ()	ns unless covered by an exis ormation and/or plans as may Date Date N Peterson FFICE	e^{e} FEB - 5 201
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Porest Service Office). Signature Title Regulatory Agent Approved by (Signature) /s/ Don Peterson FIELD MANAGER Application approval does not warrant or certify that the applicant ho conduct operations thereon. Conditions of approval, if any, are attached. 	In Lands, the 4. Bond to cover Item 20 abover Item 20 abover 1tem	er the operatio re). tification site specific inf /s/ Dor AD FIELD () rights in the sul AP F	ns unless covered by an exis ormation and/or plans as may Date Date Peterson FFICE	be required by the 7/18/12 FEB - 5 201 ethe applicant to 3
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Porest Service Office). Signature Signature Fite Regulatory Agent Approved by (Signature) /s/ Don Peterson Fite FIELD MANAGER Application approval does not warrant or certify that the applicant ho conduct operations thereon. 	ore Oil and Gas Order No. 1, must H 4. Bond to cov Item 20 abov 5. Operator cer 6. Such other : BLM. Name (Printed/Typed) Cy Cowan Office CARLSB, Ids legal or equitable title to those in the second secon	er the operatio re). tification site specific inf /s/ Dor AD FIELD () rights in the sub AP F ad willfully to r h.	ns unless covered by an exis ormation and/or plans as may Date Date Peterson FFICE Diget lease which would entitle ROVAL FOR TV nake to any department or ag	be required by the f(1) = f(1) = f(1) FEB = 5 = 201 e, the applicant to 3 ency of the United
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Porest Service Office). Signature Title Regulatory Agent Approved by (Signature) /s/ Don Peterson FIELD MANAGER Application approval does not warrant or certify that the applicant homoconduct operations thereon. Conditions of approval, if any, are attached. Title 8 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a 	ore Oil and Gas Order No. 1, must H 4. Bond to cov Item 20 abov 5. Operator cer 6. Such other : BLM. Name (Printed/Typed) Cy Cowan Office CARLSB, Ids legal or equitable title to those in the second secon	er the operatio re). tification site specific inf /s/ Dor AD FIELD () rights in the sub AP F ad willfully to r h.	ns unless covered by an exis ormation and/or plans as may Date Date Peterson FFICE	be required by the f(1) = f(1) = f(1) FEB = 5 = 201 e, the applicant to 3 ency of the United
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Porest Service Office). Signature <i>Title</i> <i>Regulatory Agent</i> <i>Approved by (Signature)</i> <i>Is/ Don Peterson Signature FIELD MANAGER Application approval does not warrant or certify that the applicant homology of approval, if any, are attached. Fitel B U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations and the statements or representat</i>	ore Oil and Gas Order No.1, must H 4. Bond to cov Item 20 abox 5. Operator cer 6. Such other H BLM. Name (Printed/Typed) Cy Cowan Office CAR:SB/ Ids legal or equitable title to those as to any matter within its jurisdiction	er the operatio re). tification site specific inf /s/ Dor AD FIELD O rights in the sut AIP F and willfully to r h. Ros	ns unless covered by an exis ormation and/or plans as may Date Deterson FFICE Spect lease which would entitly ROVAL FOR TON nake to any department or ag well Contioned of	be required by the f(1) = f(1) = f(1) FEB = 5 = 201 e, the applicant to 3 ency of the United
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Porest Service Office). Signature Regulatory Agent Approved by (Signature) /s/ Don Peterson Title FIELD MANAGER Application approval does not warrant or certify that the applicant ho conduct operations thereon. Conditions of approval, if any, are attached. Fite 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations a (Continued on page 2) Machine Continued on page 2) 	ore Oil and Gas Order No. 1, must H 4. Bond to cov Item 20 abox 5. Operator cer 6. Such other H BLM. Name (Printed/Typed) Office Office CARLSB, Ids legal or equitable title to those H Sto any matter within its jurisdiction Heti Thus S OUV APPID	er the operatio re). tification site specific inf /s/ Dor AD FIELD O rights in the sub AIP F and willfully to r N Ros A P Sub	ns unless covered by an exis ormation and/or plans as may Date Peterson FFICE Sectlease which would entitly nake to any department or ag well Controlled	be required by the f(1) $f(2)FEB - 5$ 201 FEB - 5 201
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Porest Service Office). Signature Regulatory Agent Approved by (Signature) /s/ Don Peterson Title FIELD MANAGER Application approval does not warrant or certify that the applicant ho conduct operations thereon. Conditions of approval, if any, are attached. Fite 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations a (Continued on page 2) Machine Continued on page 2) 	ore Oil and Gas Order No. 1, must H 4. Bond to cov Item 20 abox 5. Operator cer 6. Such other H BLM. Name (Printed/Typed) Office Office CARLSB, Ids legal or equitable title to those H Sto any matter within its jurisdiction Heti Thus S OUV APPID	er the operatio re). tification site specific inf /s/ Dor AD FIELD O rights in the sul AP F and willfully to r h. Ros A P Sub	ns unless covered by an exis ormation and/or plans as may Date n Peterson FFICE Diget lease which would entitle ROVAL FUH Nake to any department or ag well Conti Cillerd D W11 M1 (Q)	e FEB - 5 201 e FEB - 5 201 ethe applicant to: ency of the United
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with The appropriate Porest Service Office). Signature Regulatory Agent Approved by (Signature) /s/ Don Peterson Title FIELD MANAGER Application approval does not warrant or certify that the applicant ho conduct operations thereon. Conditions of approval, if any, are attached. Fite IS U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations a (Continued on page 2) FIELD MACHAESE MOOT Application of approval operations approval operations of fraudulent statements or representations and Applex SE MOOT Applex SE MOOT	ore Oil and Gas Order No. 1, must H 4. Bond to cov Item 20 abox 5. Operator cer 6. Such other H BLM. Name (Printed/Typed) Office Office CARLSB, Ids legal or equitable title to those H Sto any matter within its jurisdiction Heti Thus S OUV APPID	er the operatio re). tification site specific inf <u>/s/ Dor</u> AD FIELD O rights in the sul AP F ad willfully to r h Ros A P SUL SE	ns unless covered by an exis ormation and/or plans as may Date Peterson FFICE Sectlease which would entitly nake to any department or ag well Controlled	e FEB - 5 201 e FEB - 5 201 ethe applicant to: ency of the United Adates Basin

Ď

nch Dr., Hobbs, NM 88240 State of New Mexico Revised October 12, 2005 Energy, Minerals and Natural Resources Department DISTRICT II Submit to Appropriate District Office 1301 W. Grand Avenue, Artesia, NM 88210 State Lease - 4 Copies OIL CONSERVATION DIVISION Fee Lease - 3 Copies DISTRICT III 1220 South St. Francis Dr. 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, New Mexico 87505 DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 □ AMENDED REPORT WELL LOCATION AND ACREAGE DEDICATION PLAT Cotton Wood Gredeool Name API Number Pool Code gnated Wolfcamp GAS 250 Hal Well Number Property Code **Property** Name 025575-COTTONWOOD "KI" FEDERAL COM. 5H Z OGRID No. **Operator** Name Elevation 025575 3545' YATES PETROLEUM CORP. Surface Location UL or lot No. Range Lot Idn Feet from the North/South line Feet from the East/West line County Section Township 760 NORTH 305 WEST EDDY D 17 16 S 25 E Bottom Hole Location If Different From Surface UL or lot No. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 25 E 760 NORTH 660 EAST EDDY 17 16 S А **Dedicated** Acres Joint or Infill Consolidation Code Order No. 320 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION OPERATOR CERTIFICATION ĥ L-6781 NM-9402 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed boltom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a waking agreement or a o 26 _3<u>53</u>9.7' 305' 432155 -660' N Penetration Point a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division 242 354 2 $\begin{array}{l} \frac{SURFACE}{SURFACE} \ LOCATION \\ L_{0}^{2}t &= N32^{\circ}_{5}5^{\circ}_{42.36}^{\circ} \\ L_{0}^{0}ng &= W10^{\circ}_{4}^{\circ}_{30}^{\circ}_{54.71}^{\circ} \\ S_{PC}^{\circ} &= N.: \ 70^{\circ}_{5}546.571 \\ E.: \ 48^{\circ}_{5}537.151 \\ E.: \ 48^{\circ}_{5}537.151 \\ \end{array}$ BOTTOM HOLE LOCATION wa 3/12Lat - N32 55 41.65 Long - W104 30'04.01 [SPC- N.: 701468.214 [SPC- E.: 439858.446 (NAD=83) Signatur Date Cy Cowan (NAD-83) Printed Name NM-10266 Waldram . Factor is SURVEYOR CERTIFICATION A CHARLES AND A CONTRACT OF I hereby certify that the well location shown Penetration Pbint Producing Area on this plat was plotted from field notes of actual surveys made by me or under my 768' FNL & 798' **FWL** supervison, and that the same is true and Project Area correct to the best of my belief. M Date Surve MEX, Signature Professi eyo W) Certificate No. Gary L. Jones 7977 BASIN SURVEYS

CERTIFICATION YATES PETROLEUM CORPORATION Cottonwood KI Federal Com. #3H

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; and an someone under employment of Yates Petroleum Corporation has full knowledge of state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 18 day of September, 2012
Signature
Name Cy Cowan
Position Title Land Regulatory Agent
Address 105 South Fourth Street, Artesia, New Mexico 88210
Telephone (575) 748-4372
Field Representative (if not above signatory) Tim Bussell, Drilling Supervisor
Address (if different from above) Same as above.
Telephone (if different from above)
E-mail (optional)

YATES PETROLEUM CORPORATION Cottonwood KI Federal Com. #5H 760' FNL and 305' FWL (Surface Hole Location) 760' FSL and 660' FEL (Bottom Hole Location) Section 17, T16S-R25E Eddy County, New Mexico

1. The estimated tops of geologic markers are as follows:

Formation	TVD	Formation	TVD
Penrose	210'	Tubb	3040' Oil
Grayburg	450'	Abo	3740' Oil
San Andres	490' Oil	TVD Kick-Off	4312'
Glorietta	1815' Oil	Wolfcamp	4926' Gas
Yeso	1985' Oil	Lateral Hole	8907' Gas

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water: 41' Oil or Gas:

il or Gas: San Andres, Glorietta, Yeso, Tubb, Abo, and Wolfcamp.

Pressure Control Equipment: A 3000 # BOPE with a 13 5/8 opening will be installed on the 13 3/8" casing and a 5000# BOP system with a minimum 11" opening will be installed on the 9 5/8" casing and both will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit.

Auxiliary Equipment:

A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

<u>Hole Size</u>	Casing Size	<u>Wt./Ft</u>	Grade	Thread	Interval	Length
17 1/2"	13 3/8"	48#	Hybrid	ST&C	0-400'	400'
12 1/4"	9 5/8"	36#	J-55	LT&C	0-1000'	1000'
8 3/4"	5 1/2"	17#	L-80	LT&C	0-4300'	3400'
8 1/2"	5 1/2"	17#	L-80	Butress Thread	4300'-8907'	6280'

A. Casing Program: (All New)

3. ne cooling head with spools

71

l

Cottonwood KI Federal Com. #5H Page Two

<u>, 1</u>

The Well will be drilled vertically to 4312. At 4312' the well will be directionally drilled at 12 degrees per 100' with a 8 3/4" hole to 5052' MD (4789' TVD). The hole will then be reduced to an 8 ½" hole and drilled to 8907' MD (4865' TVD) where 5 1/2" casing will then will be set and cemented. The penetration point of the producing zone wil be 768' FNL and 798' FWL. The deepest TVD in the lateral will be 4865'

Minimum Casing Design Factors: Burst 1.0, Tensile Strength 1.8, Collapse 1.125

B. CEMENTING PROGRAM:

Surface Casing: Lead with 140 sacks 35:65:6PzC (Wt. 12.50 Yld 2.00). Tail in with 200 sacks Class "C" with 2% CaCl2 (Wt 14.8 Yld 1.34). Cement designed with 100% excess. TOC surface.

Intermediate Casing: Lead with 170 sacks35:65:6:PzC (Wt. 12.50 Yld. 2.00). Tail in 200 sacks Class C with 2% CaCl2 (Wt. 14.80 Yld. 1.34). Cement designed with 100% excess. TOC is surface.

Production Casing: Lead with 770 sacks 35:65:6PzC (WT 12.50 YLD 2.00). Tail in with 945 sacks of Pecos VILt with Fresh water = 9.297 gal/sack; D 151-CaCO3 Weight = 30%; D 174 Expanding Ce = 1.5% BWOC; D046- Antifoam = .2% BWOC; D800-Retarder = .6% BWOC; D112-Fluid Loss = .5% BWOC; and D 208 Viscosifier = .1% BWOC (Wt 13.00 Yld 1.41). Cement designed with 35% excess. TOC is 500'.

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

Interval	Туре	Weight	Viscosity	Fluid Loss
Spud to 400'	Fresh Water	8.6-9.2	28-32	N/C
400' to 1000'	Fresh Water	8.6-9.2	- 28-29	N/C
1000' 8907'	Cut Brine	8.8-9.2	28-34	<10-15cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

6. EVALUATION PROGRAM: See COF

Samples: 10' out from under Surface casing to 8907'. Logging: Horizontal Gamma Ray Neutron 8907' to Surface, Density 8907' to 1000', laterlog 8907' to 1000' CMR- 8907' 1000'.

Coring: None anticipated.

DST's: None anticipated

Mudlogging: Yes. Surface casing to 8907'

7. ABNORMAL CONDITIONS, BOT TOM HOLE PRESSURE AND POTENTAL HAZARDS:

Anticipated BHP:

From:	0	ТО	400'	Anticipated Max. BHP: 191	PSI
From:	400'	TO	1000'	Anticipated Max. BHP: 530	PSI
From:	1000'	ТО	4865'	Anticipated Max. BHP: 2327	PSI

Abnormal Pressures Anticipated: None

Cottonwood KI Federal Com. #5H Page Two

14

Lost Circulation Zones Anticipated: None H2S Zones Anticipated: None Anticipated Maximum Bottom Hole Temperature: 168° F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approx days to drill the well with completion taking another 30 days.

approximately 45



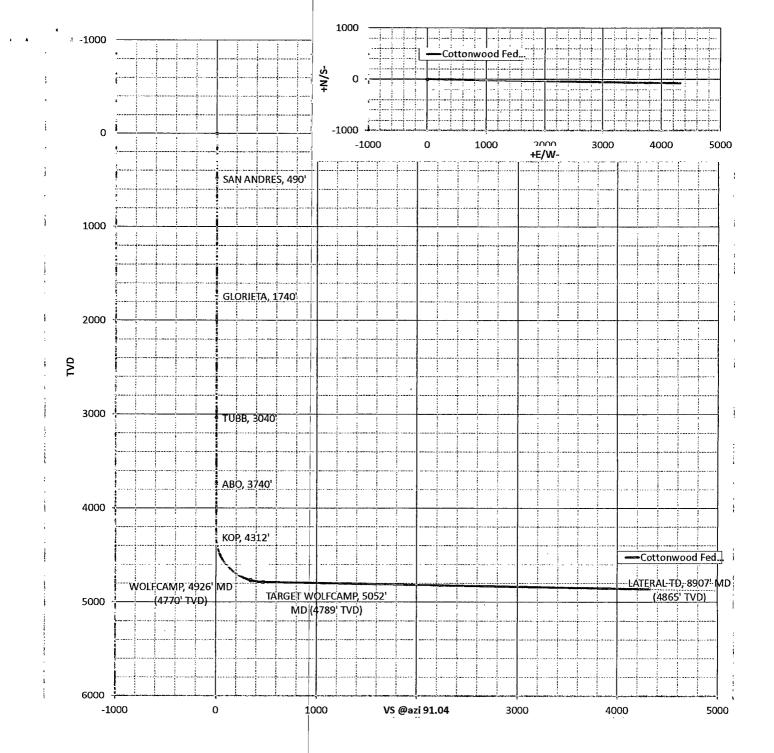
Charles and States

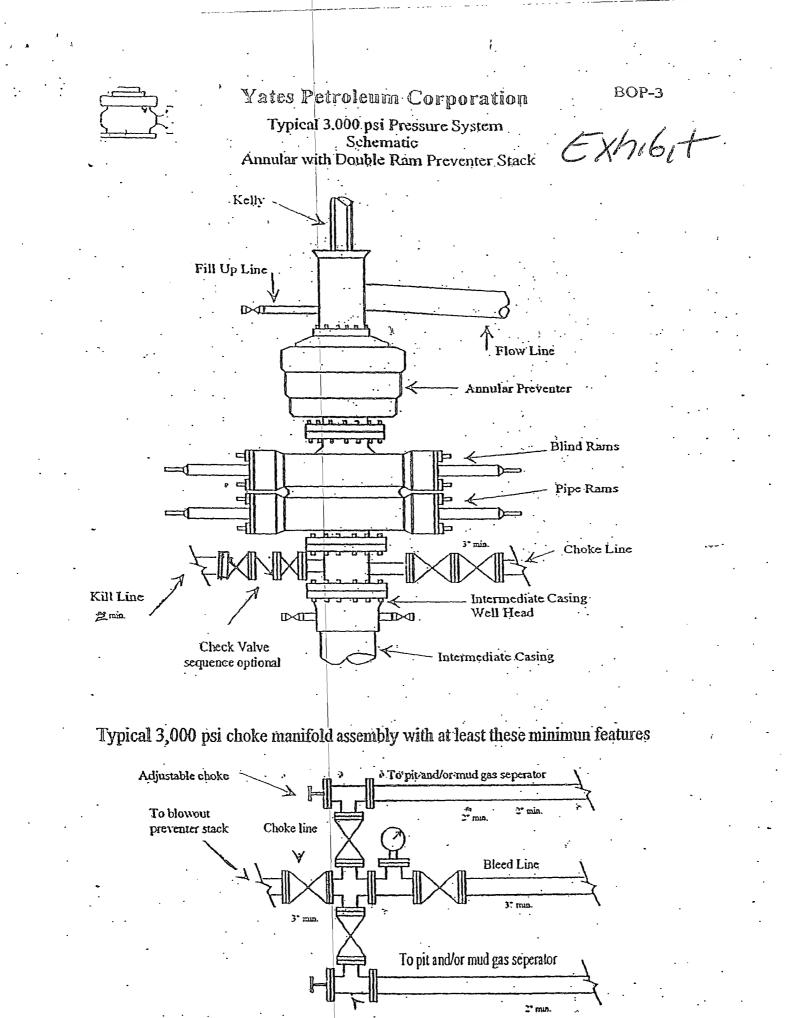


0.00 0.00 <th< th=""><th>ntral DIS 0.00</th></th<>	ntral DIS 0.00
Well Name Cottonwood Fed 5H Survey Elevation Datum 1983 - NAD83 Location Sec. 17, 16S-25E Latitude Longitude Scale Fac. Converg. MDV MDV MNCB MVLB MVCB MVCB Scale Fac. Converg. MDV MDV MNCB MVCB	diso
Location Rig Job Sec. 17, 16S-25E Latitude Longitude Units Zone Feet X302 - Utah Ce Scale Fac. Converg. 1100	diso
Rig Job Longitude Units Feet Scale Fac. Converg. MD/ 1NG 424/2 1ND/2 CN/SE CIP/SE VS@91/049 Fac. Converg. 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 490.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 490: SAN ANDRES, 490' 1740.00 0.00 0.00 0.00 0.00 0.00 0.00 1740.00 0.00 0.00 3040.00 0.00 0.00 0.00 0.00 3040.00 0.00 0.00 3740.00 0.00 0.00 0.00 0.00 3740.00 0.00 91.04 4311.61 0.00 0.00 0.00 2.11 4311.61 0.00 91.04 4319.50 -0.14 8.16 8.16 12.00 0.00 4400.00 10.61 91.04 4399.50 -0.14 8.16 8.16 12.00 0.00	diso
Job Units Feet Converg. 0.00 <t< td=""><td></td></t<>	
MD/ ING: IAD/ IAD/ CIN/SB GEAU- VS@CHOCE EBS UR 0.00 <td< td=""><td></td></td<>	
0.00 0.00 <th< th=""><th></th></th<>	
490.00 0.00 0.00 490.00 0.00 0.00 0.00 0.00 0.00 490: SAN ANDRES, 490' 1740.00 0.00 0.00 0.00 0.00 0.00 0.00 1740: GLORIETA, 1740'	0.00
490: SAN ANDRES, 490' 1740: 00 0.00 0.00 1740.00 0.00 0.00 0.00 0.00 1740: GLORIETA, 1740' 0 0.00 0.00 0.00 0.00 0.00 0.00 3040.00 0.00 0.00 3040.00 0.00 0.00 0.00 0.00 3040.00 0.00 0.00 3040.00 0.00 0.00 0.00 0.00 3040.00 0.00 0.00 3740.00 0.00 0.00 0.00 0.00 3740.00 0.00 91.04 4311.61 0.00 0.00 0.00 0.00 3740: ABO, 3740'	
1740.00 0.00 1740.00 0.00	0.00
1740: GLORIETA, 1740' 3040.00 0.00 0.00 0.00 0.00 0.00 0.00 3040: TUBB, 3040' 3740.00 0.00 0.00 0.00 0.00 0.00 3740.00 0.00 0.00 3740.00 0.00 0.00 0.00 0.00 3740.00 0.00 91.04 4311.61 0.00 0.00 0.00 0.00 3740: ABO, 3740'	
3040.00 0.00 0.00 3040.00 0.00	0.00
3040: TUBB, 3040' 3740: 00 0.00 3740.00 0.00 0.00 0.00 0.00 3740: ABO, 3740'	
3740.00 0.00 3740.00 2.11 4311.61 0.00 10.61 91.04 4399.50 -0.14 8.16 8.16 12.00 0.00 4500.00 22.61 91.04 4495.15 -0.66 36.68 36.69 12.00 0.00 4600.00 34.61 91.04 4582.78 -1.53 84.47 84.48 12.00 0.00 4700.00 46.61 91.04 4658.56 -2.71 149.42 149.45 12.00 0.00	0.00
3740: ABO, 3740' 4311.61 0.00 0.00 0.00 0.00 2.11 4311.61 0.00 91.04 4311.61 0.00 0.00 0.00 2.11 4311.61: KOP, 4312' 4400.00 10.61 91.04 4399.50 -0.14 8.16 8.16 12.00 0.00 4500.00 22.61 91.04 4495.15 -0.66 36.68 36.69 12.00 0.00 4600.00 34.61 91.04 4582.78 -1.53 84.47 84.48 12.00 0.00 4700.00 46.61 91.04 4658.56 -2.71 149.42 149.45 12.00 0.00	
4311.61 0.00 91.04 4311.61 0.00 0.00 0.00 2.11 4311.61 KOP, 4312' -	0.00
4311.61: KOP, 4312' 4400.00 10.61 91.04 4399.50 -0.14 8.16 8.16 12.00 0.00 4500.00 22.61 91.04 4495.15 -0.66 36.68 36.69 12.00 0.00 4600.00 34.61 91.04 4582.78 -1.53 84.47 84.48 12.00 0.00 4700.00 46.61 91.04 4658.56 -2.71 149.42 149.45 12.00 0.00	
4400.00 10.61 91.04 4399.50 -0.14 8.16 8.16 12.00 0.00 4500.00 22.61 91.04 4495.15 -0.66 36.68 36.69 12.00 0.00 4600.00 34.61 91.04 4582.78 -1.53 84.47 84.48 12.00 0.00 4700.00 46.61 91.04 4658.56 -2.71 149.42 149.45 12.00 0.00	0.00
4500.0022.6191.044495.15-0.6636.6836.6912.000.004600.0034.6191.044582.78-1.5384.4784.4812.000.004700.0046.6191.044658.56-2.71149.42149.4512.000.00	in han
4600.0034.6191.044582.78-1.5384.4784.4812.000.004700.0046.6191.044658.56-2.71149.42149.4512.000.00	12.00
4700.00 46.61 91.04 4658.56 -2.71 149.42 149.45 12.00 0.00	12.00
	12.00
4800.00 58.61 91.04 4719.18 -4.14 228.72 228.75 12.00 0.00	12.00
	12.00
	12.00
and the second	12.00
4926 18: WOLFCAMP, 4926' MD (4770' TVD)	
	12.00
a construction of the second	12.00
5052.19: TARGET WOLFCAMP, 5052' MD (4789' TVD)	
8906.89 88.87 91.04 4865.00 -78.36 4321.29 4322.00 0.00 0.00	
8906.89: LATERAL TD, 8907' MD (4865' TVD).	0.00



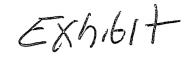
1





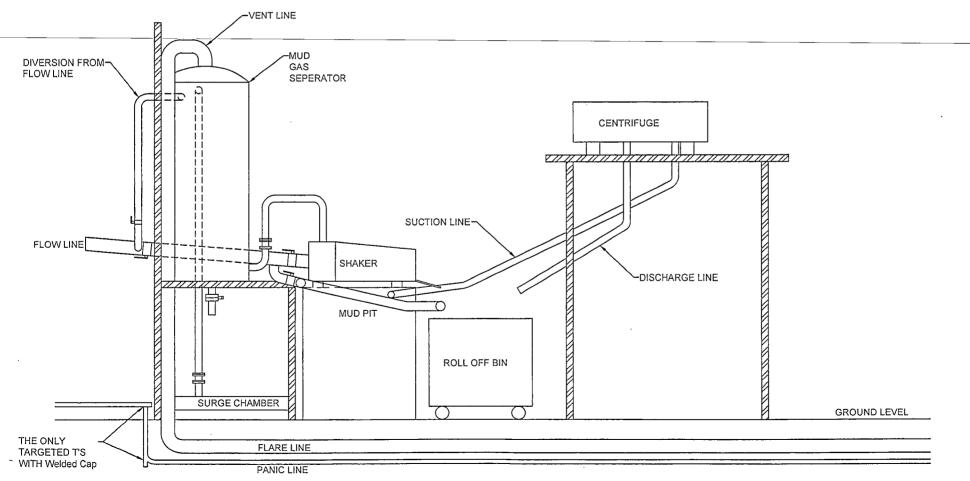
Adjustable choke

:



YATES PETROLEUM CORPORATION

Piping from Choke Manifold to the Closed Loop Drilling Mud System



The flare discharge must be 100' from wellhead for non H2S wells and 150' from wellhead for wells expected to encounter H2S.

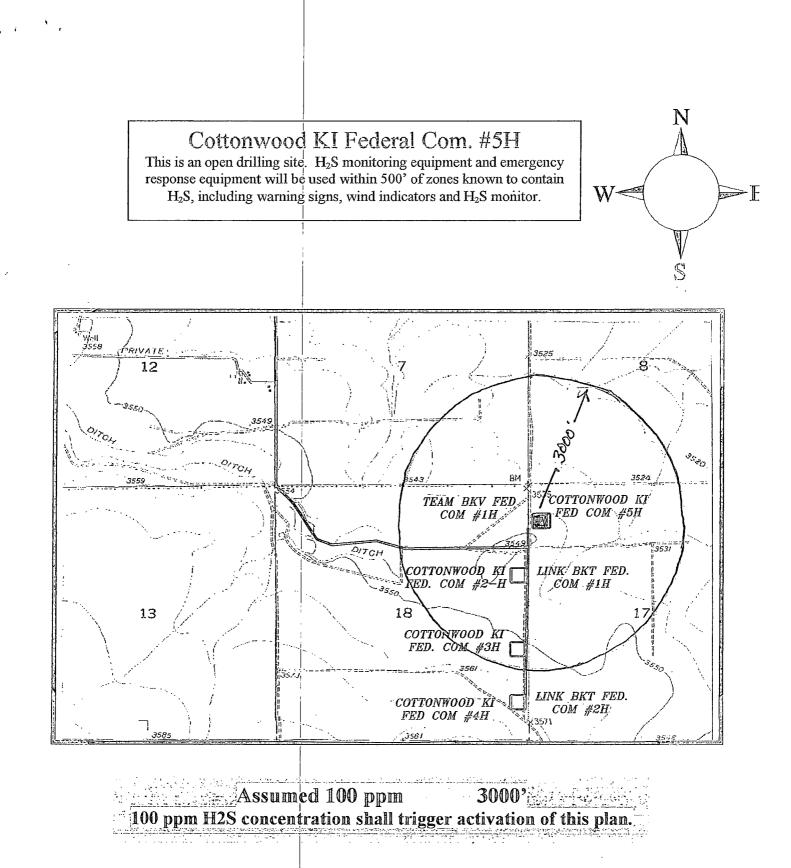
۰.

Vates Petroleum Corporation 105 S. Fourth Street Artesia, NM 88210

Hydrogen Sulfide (H₂S) Contingency Plan

For

Cottonwood KI Federal Com. #5H 760' FNL and 305' FWL Section 17, T16S,-R25E Eddy County, NM



Emergency Procedures

In the case of a release of gas containing H_2S , the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H_2S , measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H_2S monitors and air packs in order to control the release. Use the "buddy system" to ensure no injuries during the response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentr- ation
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.2 1 Air = 1	2 ppm	N/A	1000 ppm

Characteristics of H₂S and SO₂

Contacting Authorities

YPC personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. YPC Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Yates Petroleum Corporation Phone Numbers

YPC Office		(575) 748-1471
	lager	
Wade Bennett/Prod Superintendent		(575) 748-4236
LeeRoy Richards/Assistant Prod Sup	perintendent	(575) 748-4228
Mike Larkin/Drilling		(575) 748-4222
Paul Hanes/Prod. Foreman/Roswell		(575) 624-2805
Tim Bussell/Drilling Superintendent	t	
Artesia Answering Service		(575) 748-4302
(During non-office hours)		

Agency Call List

Eddy County (575)

Artesia

State Police	
	ig Committee)746-2122
NMOCD.	

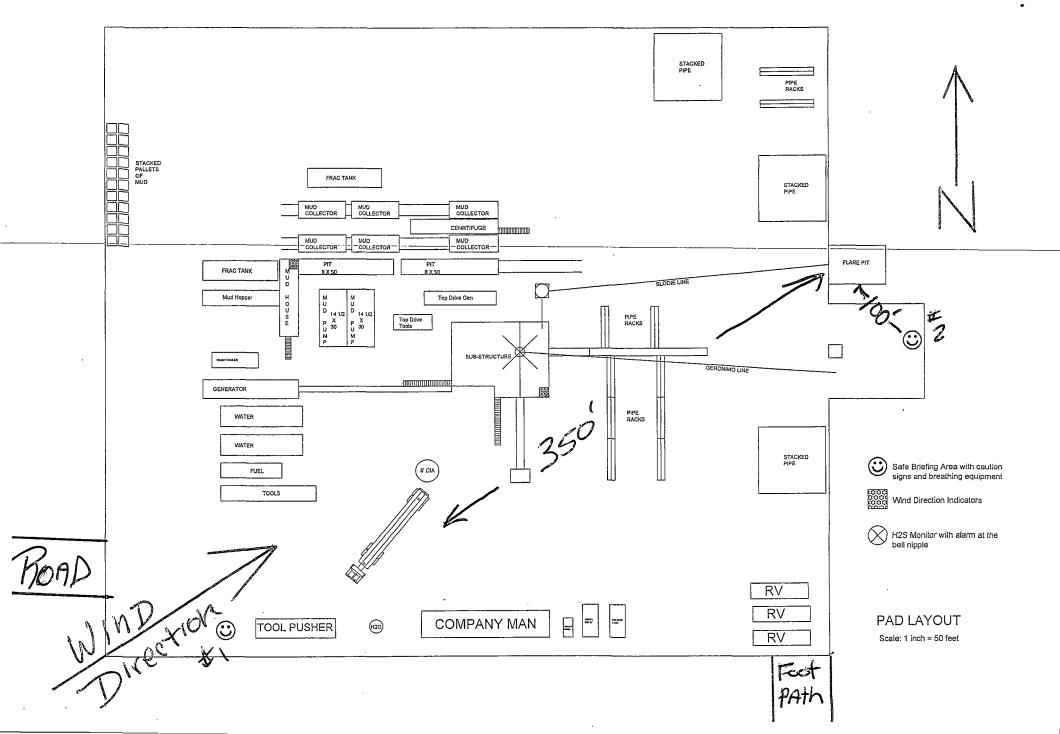
Carlsbad

State Police		885-3137
City Police	<u> </u>	885-2111
Sheriff's Office		887-7551
Ambulance		911
Fire Department		885-2111
LEPC (Local Emergency Plan	ning Committee)	887-3798
US Bureau of Land Managem	ent	887-6544
New Mexico Emergency Resp	onse Commission (Santa Fe)	(505)476-9600
24 HR	ļ	(505) 827-9126
New Mexico State Emergency	v Operations Center	(505) 476-9635
National Emergency Response		

Other

Boots & Coots IWC	1-800-256-9688 or (281) 931-8884
Cudd Pressure Control	(915) 699-0139 or (915) 563-3356
Halliburton	(575) 746-2757
B. J. Services	(575) 746-3569

YATES PETROLEUM CORPORATION



Yates Petroleum Corporation

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- 1. The hazards and characteristics of hydrogen sulfide (H2S).
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H2S on metal components. If high tensile tubular are to be used, personnel well be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- 3. The contents and requirements of the H2S Drilling Operations Plan and H2S Contingency Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operation Plan and the H2S Contingency Plan. The location of this well does not require a Public Protection Plan.

II. H2S SAFETY EQUIPMENT AND SYSTEMS

NOTE: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S.

1. Well Control Equipment:

- A. Flare line
- B. Choke manifold
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

2. Protective equipment for essential personnel:

- A. Mark II Survive Air (or equivalent) 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.
- 3. H2S detection and monitoring equipment:
 - A. 3 portable H2S monitors positioned at: Shale Shaker, Bell Nipple, and Rig Floor. These units have warning lights and audible sirens when H2S levels of 10 PPM are reached.

4. Visual warning systems

- A. Wind direction indicators as shown on well site diagram (attached).
- B. Caution/Danger signs (attached) shall be posted on roads providing direct access to location. Signs will be painted with high visibility yellow with black lettering of a sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

5. Mud program:

A. The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- B. All elastomers used for packing and seals shall be H2S trim.

7. Communication:

- A. Cellular communications in company vehicles.
- B. Land line (telephone) communication at the Office.

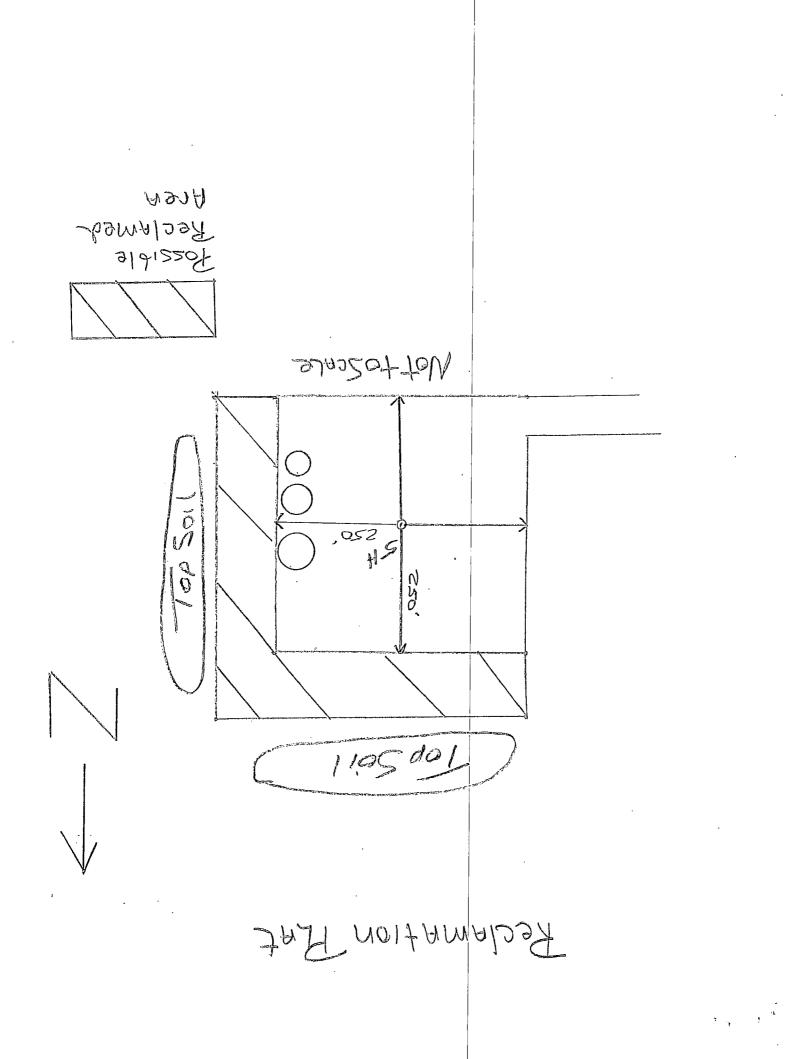
8. Well testing:

A. There will be no drill stem testing.

EXHIBIT

	DANGER
	POISONS GAS
HYD	DROGEN SULFIDE
(GREEN)	AL OPERATIONS
CAUTIO	N POTENTIAL DANGER
(YELLOW)	
6-428 (ATRA) (C.	R POISONS GAS ENCOUNTERED
(RED) AUTHOI	RIZED PERSONAL ONLY.
LOCAT	ION SECURED.
	1-575-746-1096
	1-877-879-8899

EDDY COUNTY EMERGENCY NUMBERS ARTESIA FIRE DEPT. 575-746-5050 ARTESIA POLICE DEPT. 575-746-5000 EDDY CO. SHERIFF DEPT. 575-746-9888 LEA COUNTY EMERGENCY NUMBERS HOBBS FIRE DEPT. 575-397-9308 HOBBS POLICE DEPT. 575-397-9285 LEA CO. SHERIFF DEPT. 575-396-1196



PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	
LEASE NO.:	
WELL NAME & NO.:	5H Cottonwood KI Fed Com
SURFACE HOLE FOOTAGE:	760' FNL & 305' FWL
BOTTOM HOLE FOOTAGE	760' FNL & 660' FEL
LOCATION:	Section 17, T.16 S., R.25 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

General Provisions	
Permit Expiration	
Archaeology, Paleontology,	and Historical Sites
Noxious Weeds	
$\overline{\triangleleft}$ Special Requirements	
Aplomado Falcon	
Communitization Agreen	nent
Construction	
Notification	
Topsoil	
Closed Loop System	
Federal Mineral Material	Pits
Well Pads	
Roads	
Road Section Diagram	
🛛 Drilling	
Logging Requirements	
Waste Material and Fluid	ls ·
Production (Post Drilling)	
Well Structures & Facilit	ies
Pipelines	
Electric Lines	
Interim Reclamation	
🗌 Final Abandonment & Recl	amation