New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

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Form 3160-3
(August 2007)

FORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No: **Fee & NM-105886**

6 If Indian, Allottee or Tribe Name: **N/A**

7 If Unit or CA Agreement, Name and No: **N/A**

1a Type of Work: [x] DRILL [ ] REENTER

1b Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

8 Lease Name and Well No: **Vespa "BME" Federal Com. #2H** 37904

2 Name of Operator: **Yates Petroleum Corporation** 025575

9 API Well No: 30-005-29110

3a. Address: **105 South Fourth Street, Artesia, NM 88210**

3b Phone No *(include area code)*: **505-748-1471**

10. Field and Pool, or Exploratory: **Undesignated Wolfcamp**

4 Location of well *(Report location clearly and In accordance with any State requirements *)*
At surface: **950' FSL & 200' FWL, Sec.9-15S-31E, UL M, SWSW**
At proposed prod. zone: **350' FSL & 330' FEL, Sec. 9-15S-31E,UL P, SESE**

11. Sec , T., R., M , or Blk And Survey or Area: **Section 9-T15S-R31E**

14 Name of Operator: **Yates Petroleum Corporation 025575**

12 County or Parish: **Chaves**

13 State: **NM**

15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drlg. unit line, if any)	16 No of acres in lease	17 Spacing Unit dedicated to this well
330'	160.00	S2S2

18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	19 Proposed Depth	20 BLM/ BIA Bond No on file
None	VD-8827' MD-13287'	NATIONWIDE BOND #NMB000434

21 Elevations (Show whether DF, KDB, RT, GL, etc)	22 Aproximate date work will start*	23 Estimated duration
4430' GL	ASAP	45 days

24 Attachments

ROSWELL CONTROLLED WATER BASIN

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1 shall be attached to this form.

1 Well plat certified by a registered surveyor
2. A Drilling Plan
3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)
4 Bond to cover the operations unless covered by existing bond on file(see item 20 above)
5 Operator certification
6 Such other site specific information and/ or plans as may be required by the BLM

25 Signature	Name *(Printed/ Typed)*	Date
Clifton May for Cy Cowan	Cy Cowan	9/10/2009

Title: **Land Regulatory Agent**

Approved By *(Signature)*	Name *(Printed/ Typed)*	Date
/S/ Angel Mayes	Angel Mayes	NOV 03 2009
Title: **Assistant Field Manager, Lands And Minerals**	Office: **ROSWELL FIELD OFFICE**	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to cc operations thereon
Conditions of approval, if any, are attached

APPROVED FOR 2 YEARS

Title 18 U S C Section 1001 and Title 43 U S C Section 1212, make it a crime for any person knowingly and wilfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

* *(Instructions on page 2)*

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

DECLARED WATER BASIN

CEMENT BEHIND THE 13⅜" CASING MUST BE CIRCULATED

WITNESS

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-29110	-	~~Wildcat~~ ~~Undesignated~~ Wolfcamp

Property Code	Property Name	Well Number
37904	VESPA "BME" FEDERAL COM	2H

OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORP.	4430'

Surface Location

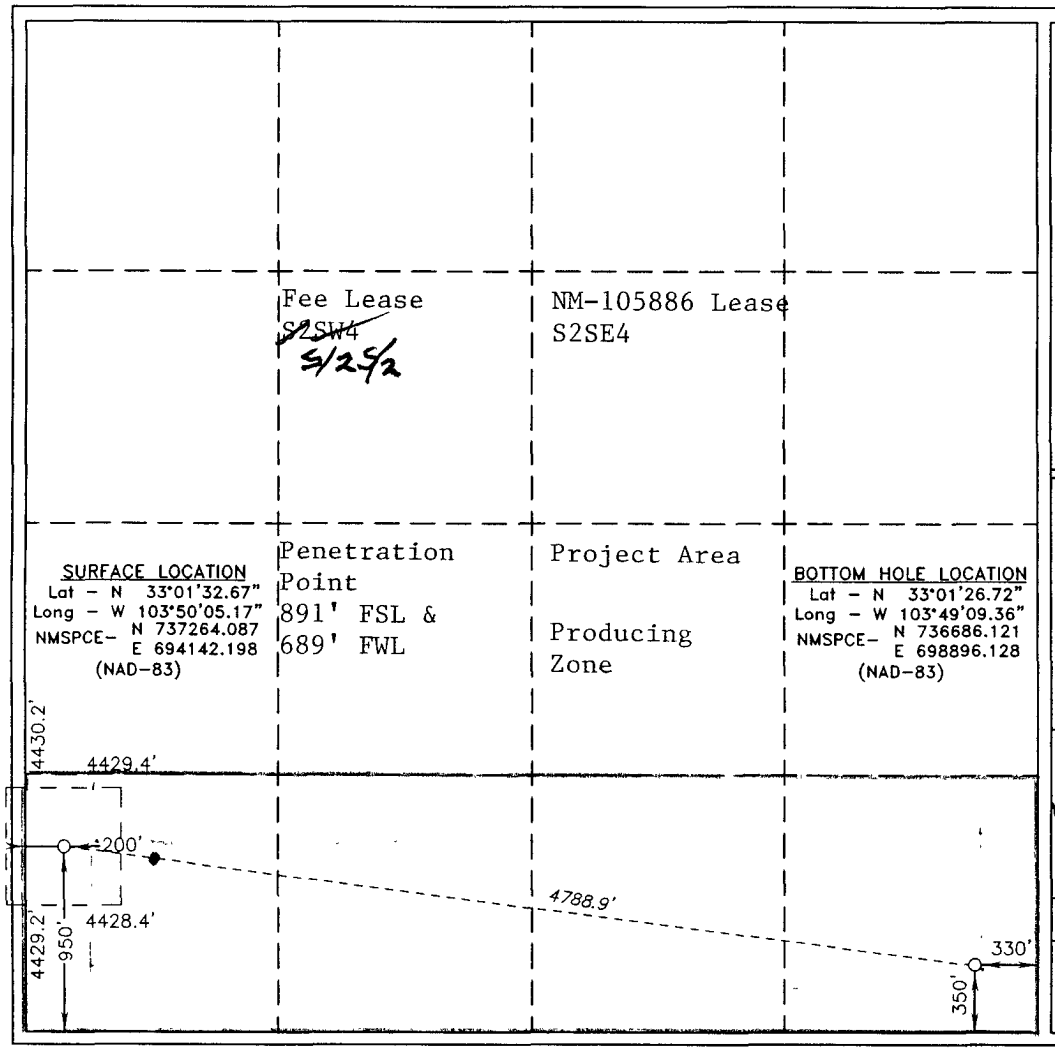
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	9	15 S	31 E		950	SOUTH	200	WEST	CHAVES

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
P	9	15 S	31 E		350	SOUTH	330	EAST	CHAVES

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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



OPERATOR CERTIFICATION

I hereby certify 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 bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Clifton May for 9/10/09
Signature Date

Cy Cowan
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

SEPTEMBER 2009
Date Surveyed

Signature & Seal of Professional Surveyor

GARY L. JONES NEW MEXICO 7977 REGISTERED PROFESSIONAL LAND SURVEYOR

NO. 21 64

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

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

B. CEMENTING PROGRAM:

Surface Casing: 425 sacks "C" + 2% CaCL2 (WT 14.80 YLD 1.34). Cement to surface.
Intermediate Casing: 1075 sacks C Lite (Wt 12.50 YLD 2.04). Tail in with 200 sacks "C" 2% CaCL2 (WT 14.80 YLD 1.33). Cement to surface.
Intermediate Casing 2: Lead with 1000 sack 50:50:10C (WT 11.60 YLD 2.43). Tail in with 200 sacks PecosVILt (WT 13.00 YLD 1.41). Cement to surface.
Production Casing: 700 sacks PecosVILt (WT 13.00 YLD 1.41) Cement to 8000'.

5. Mud Program and Auxiliary Equipment:

Interval	Type	Weight	Viscosity	Fluid Loss
Spud-400'	Fresh Water Gel	8.60-9.00	32-34	N/C
400'-3900'	Brine Water	10.0-10.20	28-28	N/C
3900'-7400'	Cut Brine	8.70-9.00	28-28	N/C
7400'-8827'	Cut Brine	8.70-9.20	28-28	<10-10cc
8227'-13287'	Cut Brine/2-3%KCL (Lateral Section)	8.80-9.00	28-32	<10-10cc

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:

Samples: 10' from intermediate casing to TD.
Logging: Platform Express; CNL/LDT/NGT TD to intermediate casing, CNL/GR TD to surface, DLL-MSFL TD to surface casing, BHC-Sonic TD to surface casing. Horizontal-MWD-GR
Coring: None anticipated.
DST's: None anticipated.
Mudlogging: Yes

7. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE AND POTENTAL HAZARDS:

Anticipated BHP: Depths are TVD

From:	0	TO	400'	TVD	Anticipated Max. BHP:	190	PSI
From:	400'	TO	3900'	TVD	Anticipated Max. BHP:	2070	PSI
From:	3900'	TO	8877'	TVD	Anticipated Max. BHP.	4250	PSI

Abnormal Pressures Anticipated: None
Lost Circulation Zones Anticipated: None
H2S Zones Anticipated: None
Maximum Bottom Hole Temperature: 120° F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 45 days to drill the well with completion taking another 30 days.

YATES PETROLEUM CORPORATION
Vespa BME Federal Com. #2H
950' FSL and 200' FWL, Section 9-T15S-R31E (Surface Hole Location)
350' FSL and 330' FEL, Section 9-T15S-R31E (Bottom Hole Location)
Chaves County, New Mexico

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

Yates	2275'	Glorieta	5185'
Seven Rivers	2418'	Tubb	6604'
Queen	3075' Oil/Gas	ABO	7375' Oil
San Andres	3775' Oil	Wolfcamp	8677' Oil
		TVD	8827'
		TMD	13287'

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

Water: 260'
Oil or Gas: Queen, Grayburg, San Andres, ABO, and Wolfcamp

3. **Pressure Control Equipment:** BOPE will be installed and tested on the 13 3/8", 9 5/8" and 7" casing and rated for 3000 psi BOP systems 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 Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors 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 B.

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:**

A. Casing Program: (**All New**)

Hole Size	Casing Size	Wt./Ft	Grade	Thread	Interval	Length
17 1/2"	13 3/8"	48#	H-40	ST&C	0-400'	400'
12 1/4"	9 5/8"	40#	J-55	ST&C	0-100'	100'
12 1/4"	9 5/8"	36#	J-55	ST&C	100-3300'	3200'
12 1/4"	9 5/8"	40#	J-55	ST&C	3300-3900'	600'
8 3/4"	7"	26#	J-55	LT&C	0-700'	700'
8 3/4"	7"	23#	J-55	LT&C	700'-5600'	4900'
8 3//4"	7"	26#	J-55	LT&C	5600'-7800'	2200'
8 3/4"	7"	26#	L-80	LT&C	7800'-8972'	1172'
6 1/8"	4 1/2"	11.6#	HCP-110	LT&C	0-13287'	13287' TVD 8840' MD 13550'

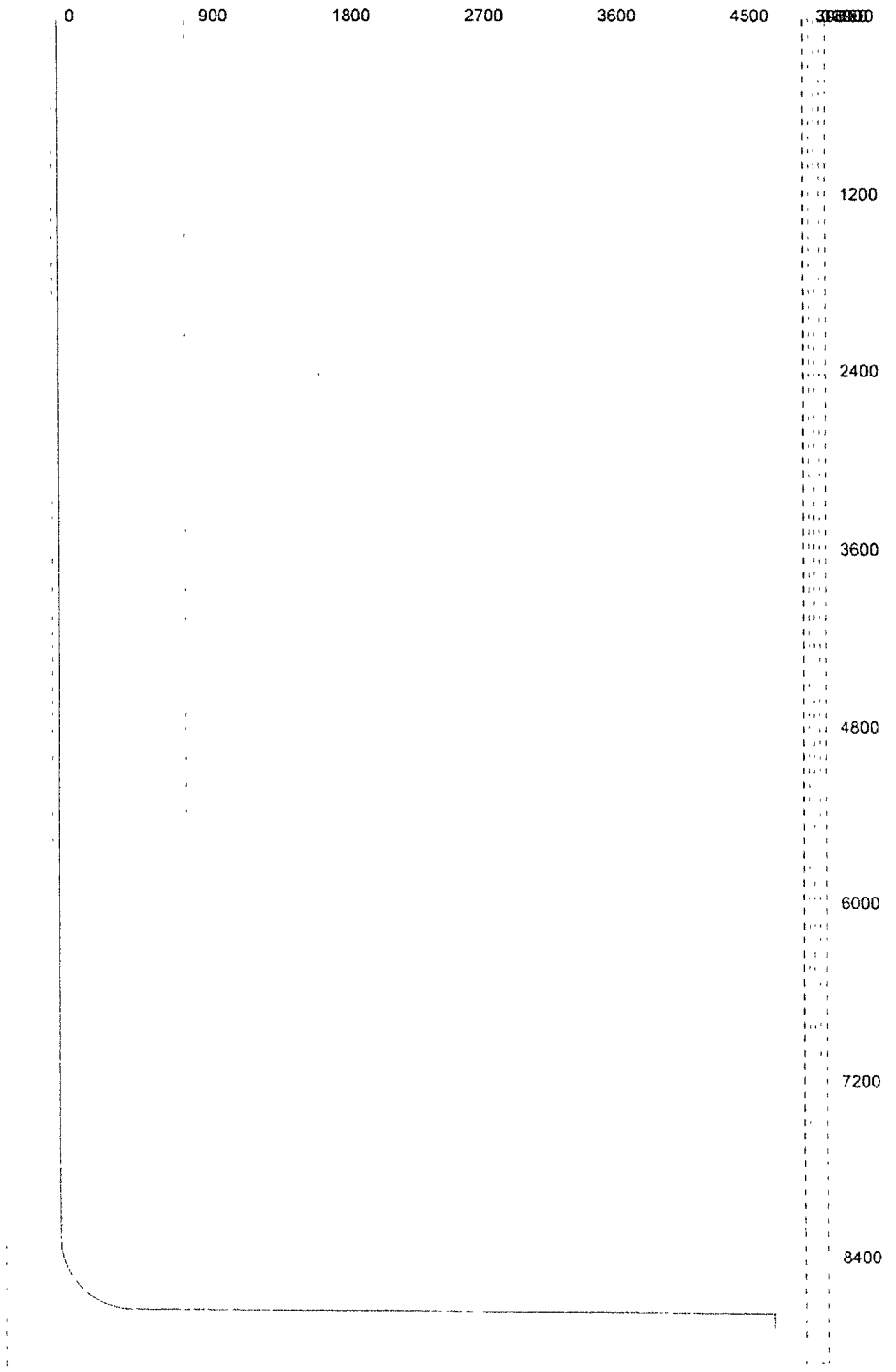
Pilot hole will be drilled with 8 3/4" to 8827'. An open hole whipstock will be placed at 8227'. Well will then be kicked off at approx. 8227' at 12 degrees per 100' with an 8 3/4" hole to 8972' MD (8705 TVD) where 7" casing will be run and cemented. A 6 1/8" hole will then be drilled to 13287' MD (8750' TVD) where 4 1/2" casing will be set and cemented up to a DV Tool placed at approximately 8000'. Once completion procedures are done the 4 1/2" will be cut and pulled at 8000'. The penetration point of producing formation will be encountered at 891' FSL & 669' FWL, Section 9, T15S-R31E. Deepest TVD of the well will be in the pilot hole @ 8827'. The deepest TVD in the lateral will be 8750'.

M.D.	Inclination	Azimuth	T.V.D.	N+/S-	E+/W-	D.L.S.	ToolFace	T.F. Ref [HS/GN]	
0	0	0	0	0	0	0			
2,275	0	0	2,275	0	0	0			YATES
2,418	0	0	2,418	0	0	0			SEVEN RIVERS
3,075	0	0	3,075	0	0	0			QUEEN
3,775	0	0	3,775	0	0	0			SAN ANDRES
5,185	0	0	5,185	0	0	0			GLORIETA
6,604	0	0	6,604	0	0	0			TUBB
7,375	0	0	7,375	0	0	0			ABO
8227	0	0	8227	0	0	12	97	GN	KOP
8250	2.76	97 2	8249.99	-0.07	0 55	12	360	HS	
8275	5.76	97 2	8274.92	-0.3	2 39	12	0	HS	
8300	8.76	97.2	8299.72	-0.7	5.53	12	0	HS	
8325	11.76	97.2	8324.31	-1.26	9.94	12	360	HS	
8350	14.76	97.2	8348.65	-1 97	15.63	12	0	HS	
8375	17 76	97 2	8372 64	-2.85	22.58	12	360	HS	
8400	20.76	97 2	8396.24	-3.88	30.76	12	0	HS	
8425	23.76	97.2	8419.37	-5.07	40.15	12	0	HS	
8450	26.76	97.2	8441.98	-6 41	50 73	12	0	HS	
8475	29 76	97 2	8464	-7.89	62.48	12	360	HS	
8500	32.76	97.2	8485.37	-9.52	75.34	12	0	HS	
8525	35.76	97 2	8506.03	-11.28	89.31	12	0	HS	
8550	38 76	97.2	8525.92	-13 18	104.32	12	360	HS	
8575	41.76	97.2	8545	-15 2	120 35	12	360	HS	
8600	44.76	97.2	8563.2	-17.35	137.34	12	0	HS	
8625	47.76	97.2	8580.48	-19.61	155.26	12	0	HS	
8650	50 76	97.2	8596 8	-21 99	174 05	12	0	HS	
8675	53.76	97.2	8612.1	-24 46	193 66	12	0	HS	
8700	56.76	97.2	8626 34	-27.04	214.04	12	0	HS	
8725	59.76	97.2	8639.49	-29 7	235 13	12	0	HS	
8750	62.76	97.2	8651 51	-32 45	256.88	12	0	HS	
8775	65 76	97.2	8662.37	-35.27	279.22	12	0	HS	
8800	68.76	97.2	8672.03	-38.16	302.09	12	0	HS	
8814	70 44	97.2	8676.91	-39 8	315.11	12	0	HS	WOLFCAMP
8825	71.76	97.2	8680 47	-41 11	325 43	12	0	HS	
8850	74.76	97.2	8687.67	-44 11	349 18	12	0	HS	
8875	77.76	97.2	8693.61	-47.15	373.27	12	360	HS	
8900	80 76	97 2	8698.27	-50 23	397 64	12	360	HS	
8925	83 76	97.2	8701 64	-53 33	422 21	12	0	HS	
8950	86 76	97.2	8703 7	-56 45	446 93	12	360	HS	
8971.96	89.4	97.2	8704.44	-59.2	468.7	0			PAY ZONE
13287.52	89.4	97.2	8750	-600	4750	0			LATERAL TD

Pilot hole will be drilled with 8 3/4" hole to 8827'. An open hole whipstock will be placed at 8227' Well will then be kicked off at approx. 8227' with an 8 3/4" hole at 12 degrees per 100' to 8,972' MD (8,704' TVD) where 7" casing will be run and cemented. A 6 1/8" hole will then be drilled to 13,287' MD (8750' TVD) where 4 1/2" will be set and cemented up to a dv tool placed at approx 8000' Once completion procedures are done the 4 1/2" will be cut and pulled at 8000'. Penetration point of producing formation encountered at 891' FSL and 669' FWL, 9-15S-31E Deepest TVD of the well will be in the pilot hole @ 8,827'. Deepest TVD in the lateral will be 8750'

3D³ Directional Drilling Planner - 3D View

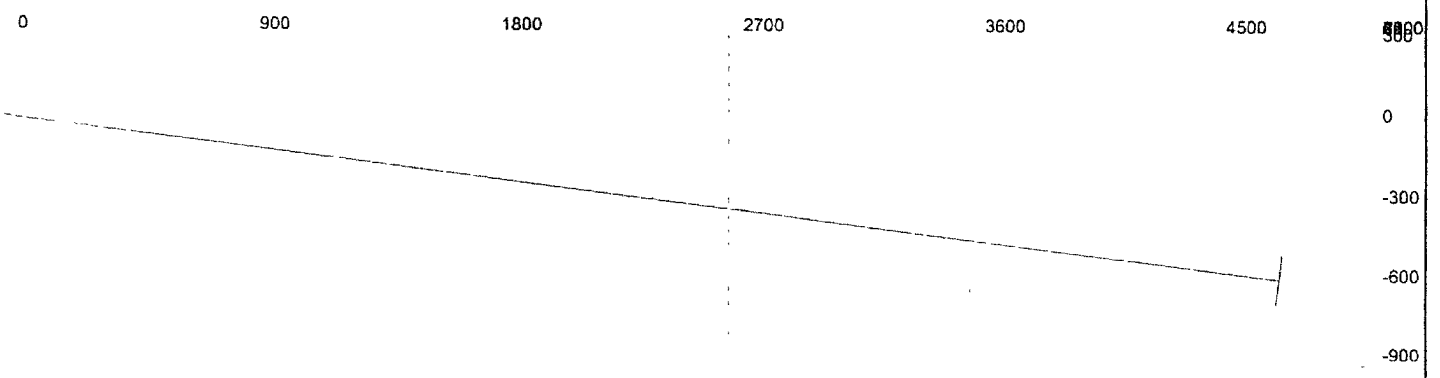
Company: **Yates Petroleum Corporation**
Well: **Vespa BME Federal #2H**



File: C:\Documents and Settings\jeremiah\Desktop\vespa2h.wpp

3D³ Directional Drilling Planner - 3D View

Company: **Yates Petroleum Corporation**
Well: **Vespa BME Federal #2H**



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CERTIFICATION
YATES PETROLEUM CORPORATION
Vespa "BME" Federal Com. #2H

I hereby certify that I or the company I represent, have inspected the drill site and access route proposed herein; that the company I represent is familiar with the conditions which currently exist; that 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 the company I represent is 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 10th day of September, 2009.

Printed Name Cy Cowan

Signature Clifton May for Cy Cowan

Position Title Land Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372

E-mail (optional) cyc@ypcnm.com

Field Representative (if not above signatory) Tim Bussell

Address (if different from above) Same

Telephone (if different from above) 575-748-4221

E-mail (optional)

WELD24Y **Inquire/Update Drilling Prognosis - Land Fields Update** 9/09/09
14:53:29

Well Name . . . VESPA BME FEDERAL COM. #2H
Location. . . . 15S 31E 9 P 001 CHA NM
Orig. Entry Dt. 9/09/2009

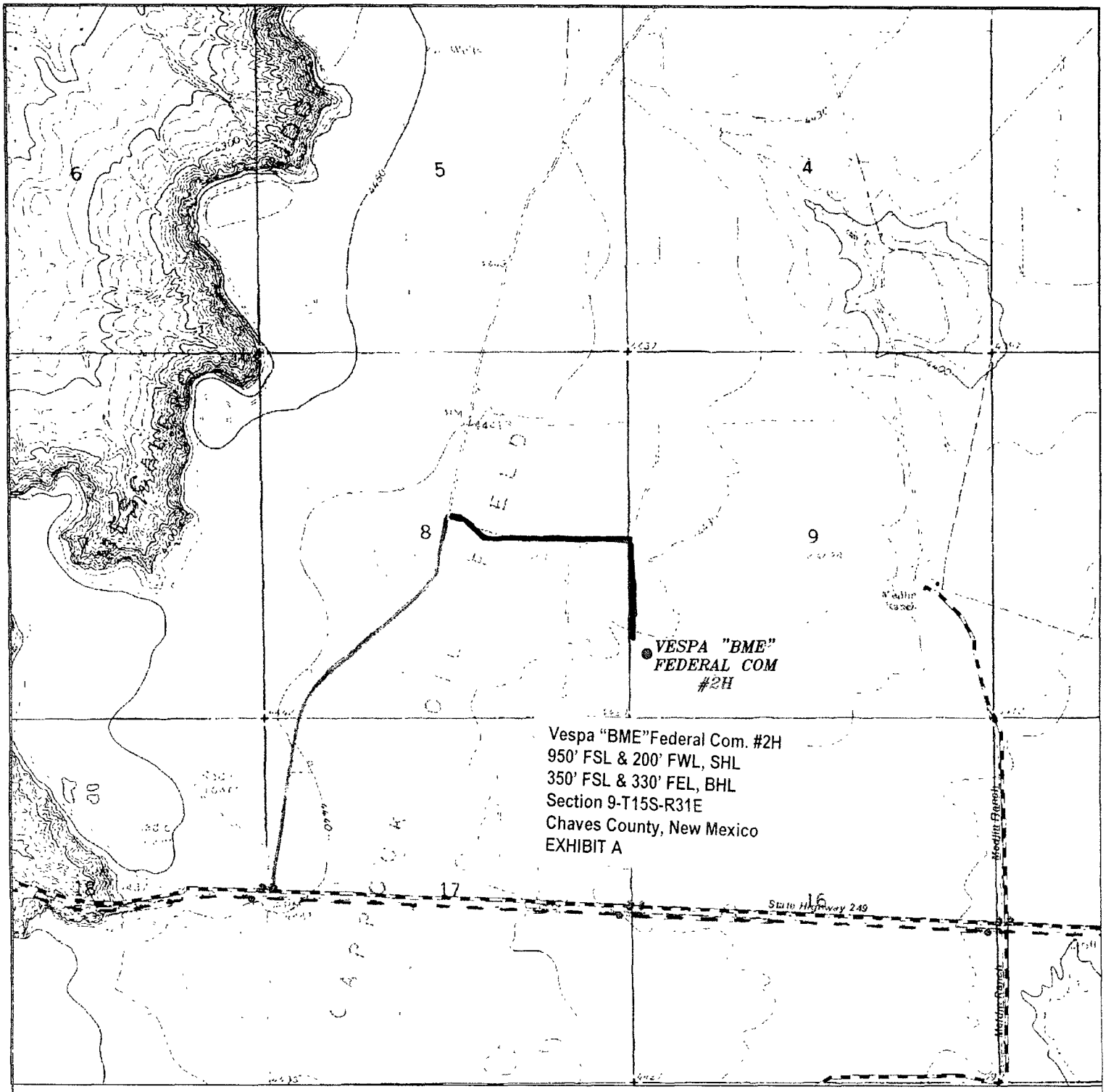
Directions to Location

FROM MALJAMAR, NM GO 1 MILE EAST ON HWY 82 TO STATE ROAD 249. TURN LEFT ON 249 FOR ABOUT 11 MILES TO SR 249 TURNS LEFT AND MEETS SR 172. GO WEST ON SR 249 (ABERDEEN ROAD) AND GO ABOUT 2.9 MILES. TURN NORTH ON LEASE ROAD AND GO ABOUT 1.2 MILES. THE NEW ROAD WILL START HERE AND GO 0.1 OF A MILE IN A SOUTHEASTERLY DIRECTION FOR ABOUT 0.1 OF A MILE. THE ROAD TURNS EAST AND YOU GO ABOUT 0.4 OF A MILE AND THE ROAD TURNS SOUTH FOR ABOUT 0.25 OF A MILE TO THE SOUTHWEST CORNER OF THE PAD.

More...

F14=Duplicate

F3=Exit F12=Previous F4=Prompt F2=Main F6=Geological Prog. F7=Drilling Prog.
F8=Mud Prog. F9=Other Instr. F10=Directions to Loc. F13=Vendor Check List



VESPA "BME" FEDERAL COM #2H

Located 950' FSL and 200' FWL
Section 9, Township 15 South, Range 31 East,
N.M.P.M., Chaves County, New Mexico.

basin surveys
focused on excellence in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number: JMS 21675
Survey Date: 09-03-2009
Scale 1" = 2000'
Date: 09-08-2009

N

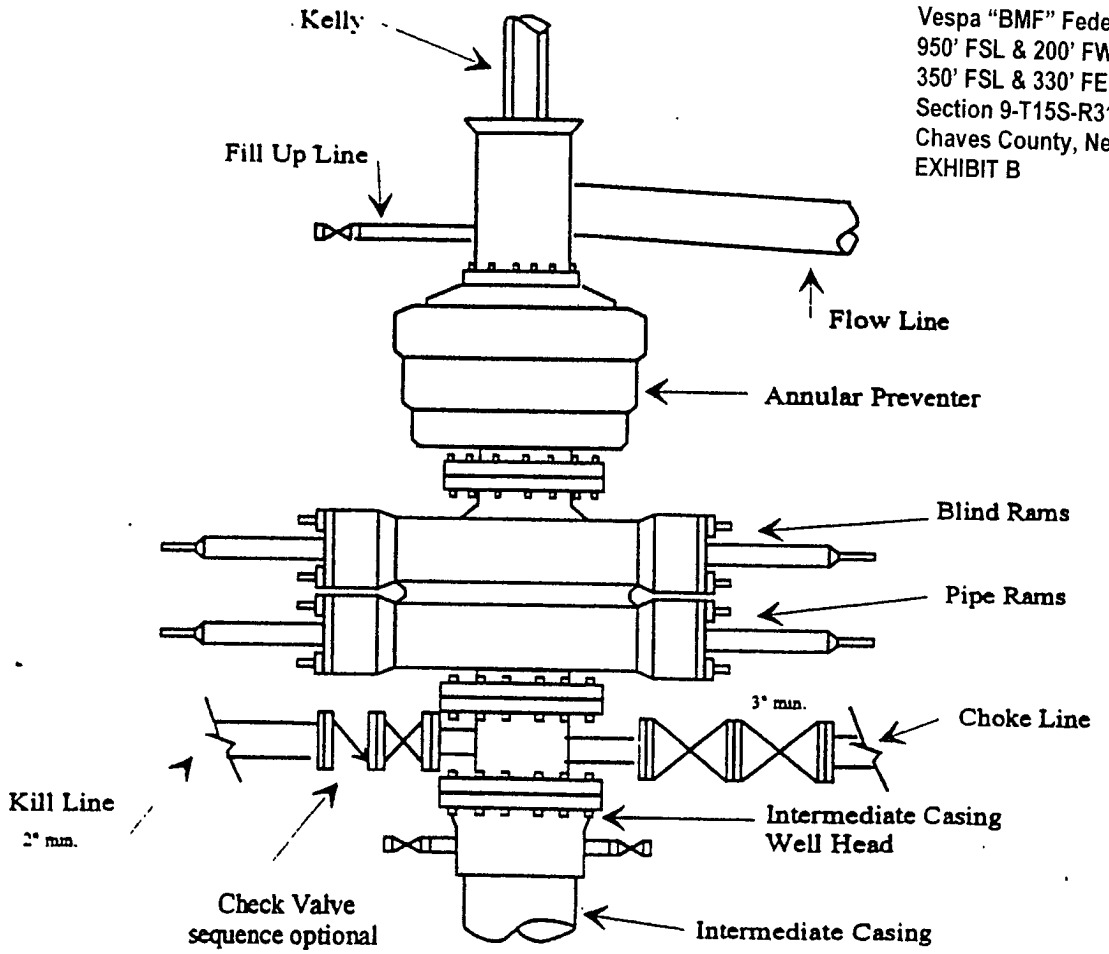
YATES PETROLEUM CORP.

Yates Petroleum Corporation

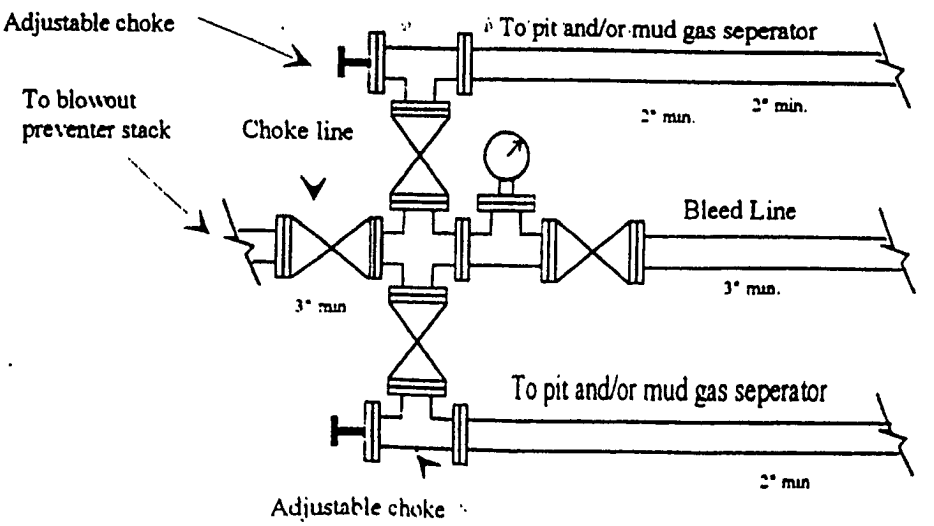
BOP-3

Typical 3,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack

Vespa "BMF" Federal Com. #2H
950' FSL & 200' FWL, SHL
350' FSL & 330' FEL, BHL
Section 9-T15S-R31E
Chaves County, New Mexico
EXHIBIT B



Typical 3,000 psi choke manifold assembly with at least these minimun features

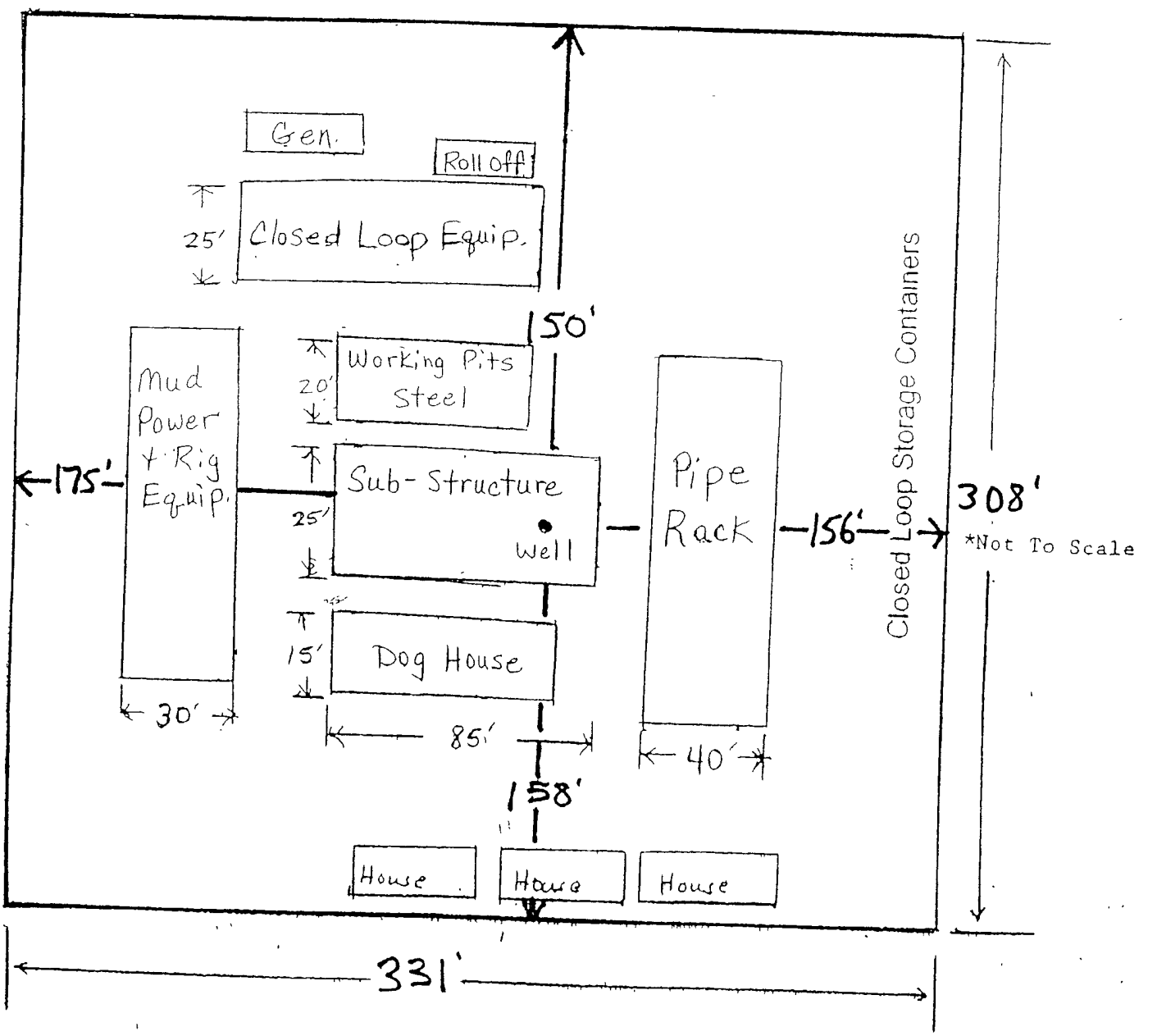


Yates Petroleum Corporation

Location Layout for Permian Basin

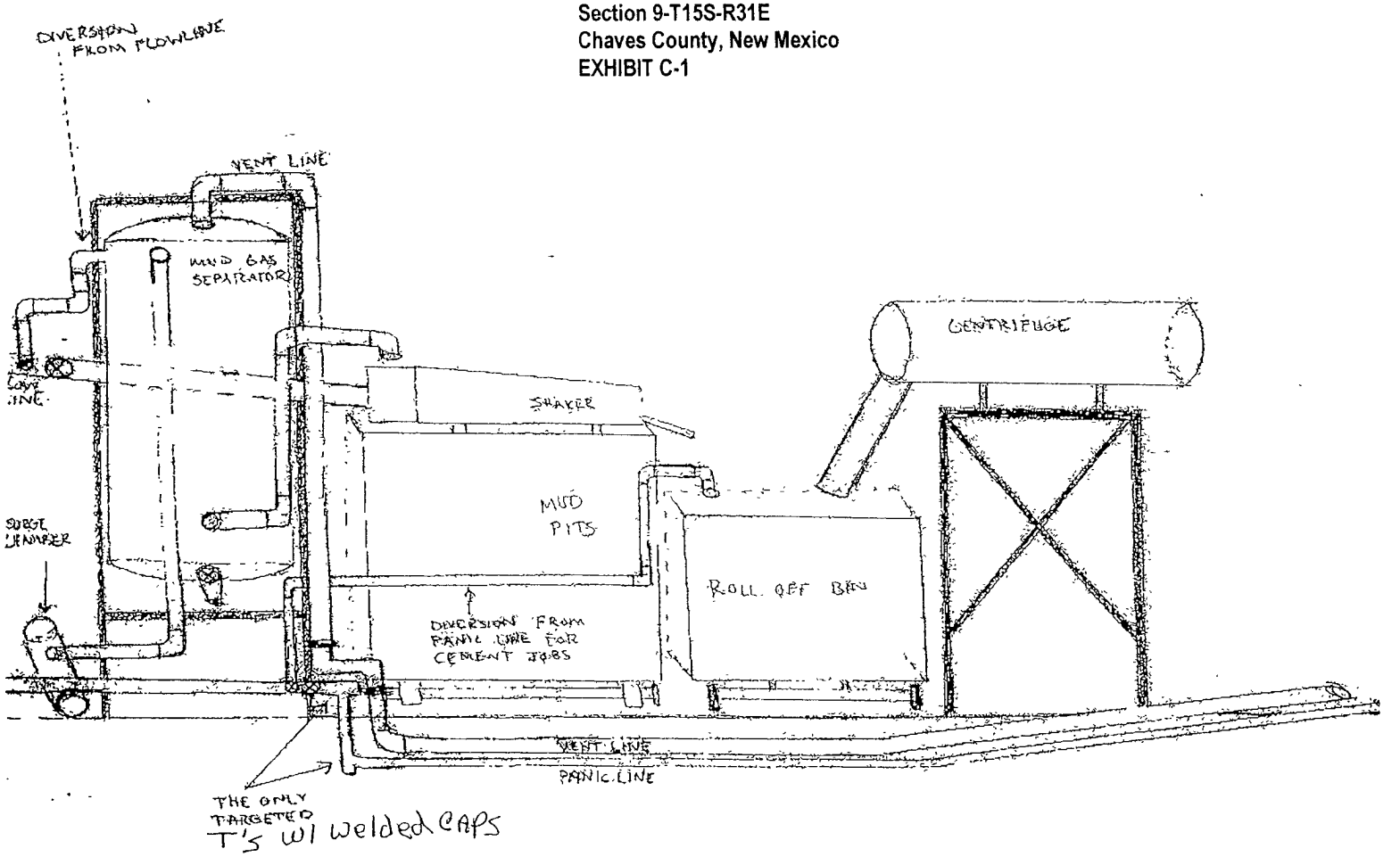
Vespa "BMF" Federal Com. #2H
950' FSL & 200' FWL, SHL
350' FSL & 330' FEL, BHL
Section 9-T15S-R31E
Chaves County, New Mexico
EXHIBIT C

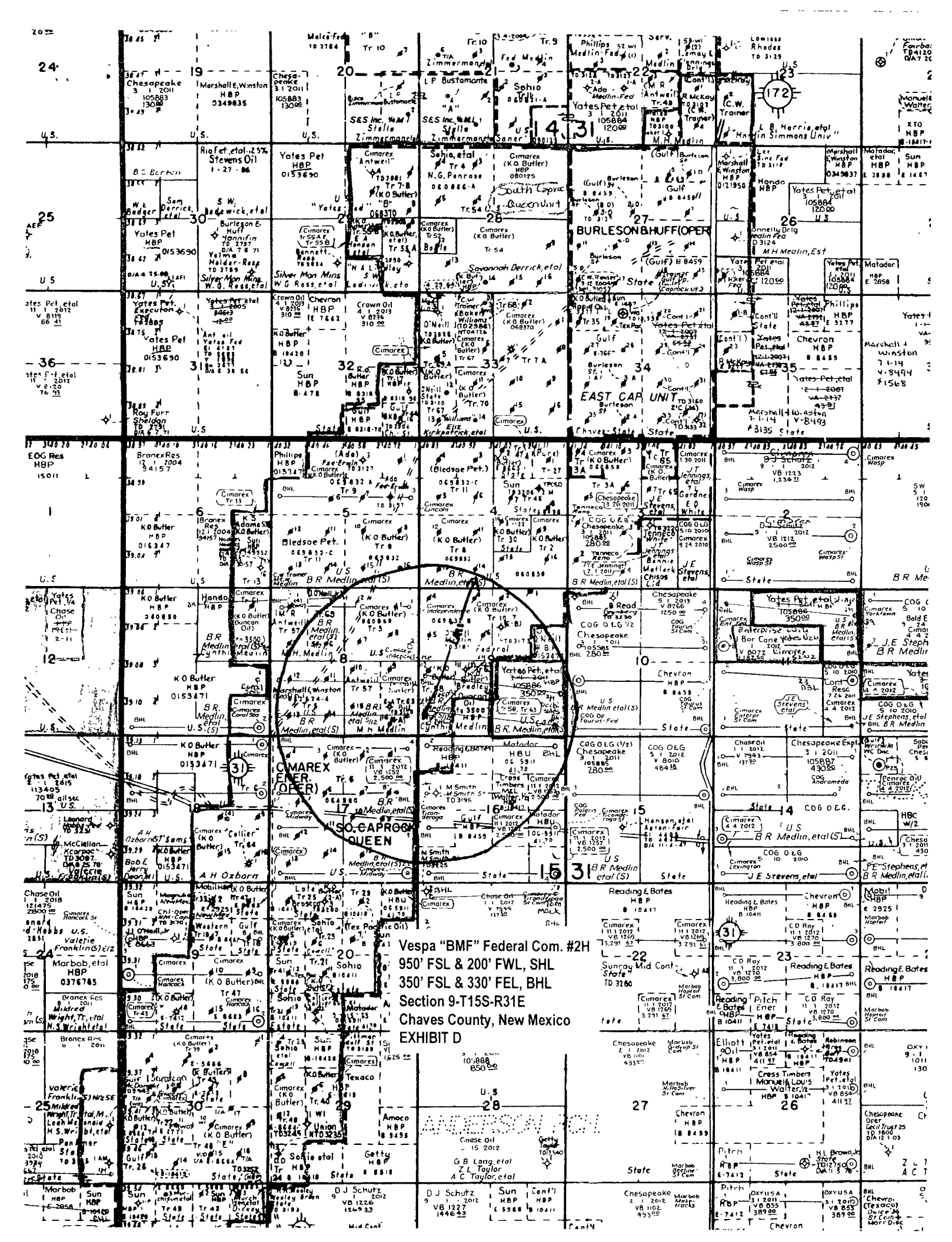
Closed Loop Design Plan



YATES PETROLEUM CORPORATION
Piping from Choke Manifold
to the Closed-Loop Drilling Mud System

Vespa "BMF" Federal Com. #2H
950' FSL & 200' FWL, SHL
350' FSL & 330' FEL, BHL
Section 9-T15S-R31E
Chaves County, New Mexico
EXHIBIT C-1




Vespa "BMF" Federal Com. #2H
950' FSL & 200' FWL, SHL
350' FSL & 330' FEL, BHL
Section 9-T15S-R31E
Chaves County, New Mexico
EXHIBIT D

November 3, 2009

I, Jace Reid as the appointed Authorized Representative for Billy R. Medlin and Donna K. Medlin owners of the surface on which Yates Petroleum Corporation's Vespa BME Federal Com. #2H well shall be drilled upon being the 950' FSL and 200' FWL, Section 9, T15S-R31E, Chaves County, New Mexico I hereby authorize Yates Petroleum Corporation to drill this well from non-federal lands and as authorized representative I guarantee the Department of the Interior, including the Bureau of Land Management access to the non-federal lands to perform all necessary surveys and inspections of this well location.

Jace Reid, Authorized Representative for
Billy R. Medlin and Donna K. Medlin
Surface Owners.

11. SURFACE OWNERSHIP:

Split Estate—Private Surface Surface owners are Billy R. Medlin and Donna K. Medlin, his wife, as joint tenants. Mailing address is P.O. Box 50 Maljamar, NM 88264. Yates Petroleum Corporation has entered into a surface use agreement with Mr. Medlin to access and drill the Vespa BME Federal Com. #2H well. Please be advised the Bureau of Land Management will not be supplied with a copy of the agreement between Yates Petroleum Corporation and Mr. Medlin as it is confidential between the two parties.

Mineral estate administered by the Bureau of Land Management, Roswell Field Office. 2909 West Second Street, Roswell, NM 88201.

12. OTHER INFORMATION:

A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, and dwellings, historical and cultural sites.
B. The primary surface use is for grazing.

V. DRILLING

DRILLING OPERATIONS REQUIREMENTS

1. Call the Roswell Field Office, 2909 West Second St., Roswell, NM 88201. During office hours call (575) 627-0205 or after office hours call (575) 910-6024. Engineer on call during office hours call (575) 627-0275 or after office hours call (575) 626-5749.

2. The BLM is to be notified a minimum of 24 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

BOPE Tests

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Include the API Number assigned to well by NMOCD on the subsequent report of setting the first casing string.

5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

6. The operator will accurately measure the drilling rate in ft/min to set the base of the usable water protection casing string(s) opposite competent rock. The record of the drilling rate along with the caliper-gamma ray-neutron well log run to surface will be submitted to this office as well as all other logs run on the borehole 30 days from completion

7. Air, air-mist or fresh water and non toxic drilling mud shall be used to drill to the base of the usable water protection casing string(s). Any polymers used will be water based and non-toxic.

B. CASING

1. The 13-3/8 inch usable water protection casing string(s) shall be set at approximately 400 feet in competent bedrock. If the bedrock at this depth is not competent for cementing the usable water protection casing string; the operator will drill to the next competent bedrock (i.e. 15 to 25 ft or greater) to set the casing in the event Halite (salt) is encountered the operator will set casing 25 ft above the salt.

a. If cement does not circulate to the surface, the Roswell Field Office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin or 500 pounds compression strength, whichever is greater. (This is to include the lead cement).

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.

d. If cement falls back, remedial action will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is **sufficient to circulate to the surface.** If cement does not circulate see B.1.a-d above.

3. The minimum required fill of cement behind the **7** inch production casing is **sufficient to tie back 200 feet into the 9-5/8 inch intermediate casing set at 3900 feet**. If cement does not circulate, a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

4. The minimum required fill of cement behind the **4-1/2** inch production casing (liner) is **sufficient to tie back 200 feet into the 7 inch production casing set at approximately 8972 feet**. If cement does not circulate, a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

5. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

6. All casing shall be new or reconditioned and tested casing and meet API standards for new casing. The use of reconditioned and tested casing shall be subject to approval by the authorized officer. Approval will be contingent upon the wall thickness of any casing being verified to be at least 87-1/2 per cent of the nominal wall thickness of new casing.

C. PRESSURE CONTROL:

1. Before drilling below the **13-3/8** inch surface casing shoe, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve. Before drilling below the **9-5/8** inch intermediate casing shoe, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve.

2. Before drilling below the **13-3/8** inch surface casing shoe, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **2000** psi. Before drilling below the **9-5/8** inch intermediate casing shoe, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **3000** psi.

3. The BOPE shall be installed before drilling below the **13-3/8** inch surface casing and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

a. The BLM Roswell Field office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

b. The tests shall be done by an independent service company.

c. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

d. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the BLM Roswell Field Office at 2909 West Second Street, Roswell, New Mexico 88201.

e. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

f. Testing must be done in a safe workman like manner. Hard line connections shall be required.

VI. PRODUCTION

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim re-contouring and re-vegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, Juniper Green (Standard Environmental Color Chart June 2008).

VRM Facility Requirement

Low-profile tanks not greater than eight-feet-high shall be used.

VII. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses.

During reclamation, the removal of caliche is important to increasing the success of re-vegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, in order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing re-vegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be re-vegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

Loamy, SD-3 Ecological Site; Loamy CP-2; Gyp Upland CP-2 (for Loamy HP-3)

Common Name and Preferred Variety	Scientific Name	Pounds of Pure Live Seed Per Acre
Blue grama,	*(Bouteloua gracilis)*	4.00 LBS.
Sideoats grama,	*(Bouteloua curtipendula)*	1.0 LB.
Sand dropseed	*(Sporobolus cryptandrus)*	0.5 LB.
Vine mesquite	*(Panicum obtusum)*	1.0 LB.
Plains bristlegrass	*(Setaria macrostachya)*	1.0 LB.
Indian blanketflower	*(Gaillardia aristata)*	0.5 LB.
Desert or Scarlet	*(Sphaeralcea ambigua)*	1.0 LB.
Globemallow or	*(S. coccinea)*	
Annual sunflower	(Helianthus annuus)	0.75 LB.
TOTAL POUNDS PURE LIVE SEED (pls) PER ACRE		9.75 LBS.

Certified Weed Free Seed. If one species is not available, increase ALL others proportionately.
Use No Less than 4 species, including one forb. No less than 9.75 pounds lbs per acre shall be applied.

VIII. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

a. Upon abandonment of the well and/or when the access road is no longer in service, a Notice of Intent for Final Abandonment with the proposed surface restoration procedure must be submitted for approval.

b. On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the Private Surface Land Owner agreements and a copy of the release is to be submitted upon abandonment.

c. Upon abandonment of the well, all casing shall be cut-off at the base of the cellar or 3-feet below final restored ground level (whichever is deeper). A 4-inch pipe, 10 feet in length, shall be installed 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: Well name and number, the name of the operator, the lease serial number, the surveyed location (the quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer; such as metes and bounds).

d. Surface Reclamation must be completed within 6 months of well plugging. If the operator proposes to modify the plans for surface reclamation approved on the APD, the operator must attach these modifications to the Subsequent Report of Plug and Abandon using Sundry Notices and Reports on Wells, Form 3160-5.