

OCD Artesia

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

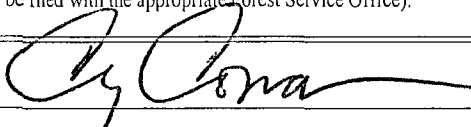
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-94614 & NM-82902
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator YATES PETROLEUM CORPORATION		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 105 South Fourth Street Artesia, NM 88210	3b. Phone No. (include area code) 575-748-4347	8. Lease Name and Well No. Checker "BIC" Federal Com #31
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface UL H, Section 9-T19S-R31E, 1980' FNL & 330' FEL At proposed prod. zone UL E Section 9-T19S-R31E, 1980 FNL & 330' FWL		9. API Well No. 30-015-41403
14. Distance in miles and direction from nearest town or post office* Approximately 14 miles southeast of Loco Hills, New Mexico		10. Field and Pool, or Exploratory Undesignated Bone Spring
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	16. No. of acres in lease NM-94614--320 acres NM-82902-- 920 acres	11. Sec., T. R. M. or Blk. and Survey or Area Section 9-T19S-R31E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approximately 250'.	19. Proposed Depth 9046' TVD 13463' MD	12. County or Parish Eddy County
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3574' GL	22. Approximate date work will start* 09/04/2012	13. State NM
17. Spacing Unit dedicated to this well S2N2 160 acres in Section 9-19S-31E		
20. BLM/BIA Bond No. on file Nation Wide Bond #NM-B000434 Individual Bond# NM-B000920		
23. Estimated duration 60 days		

24. Attachments

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

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature 	Name (Printed/Typed) Cy Cowan	Date 8/6/12
Title Land Regulatory Agent		

Approved by (Signature) /s/George MacDonell	Name (Printed/Typed)	Date MAY - 8 2013
Title FIELD MANAGER	Office CARLSBAD 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 conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO 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 willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

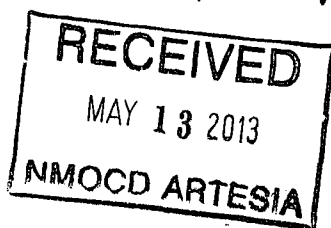
(Continued on page 2)

*(Instructions on page 2)

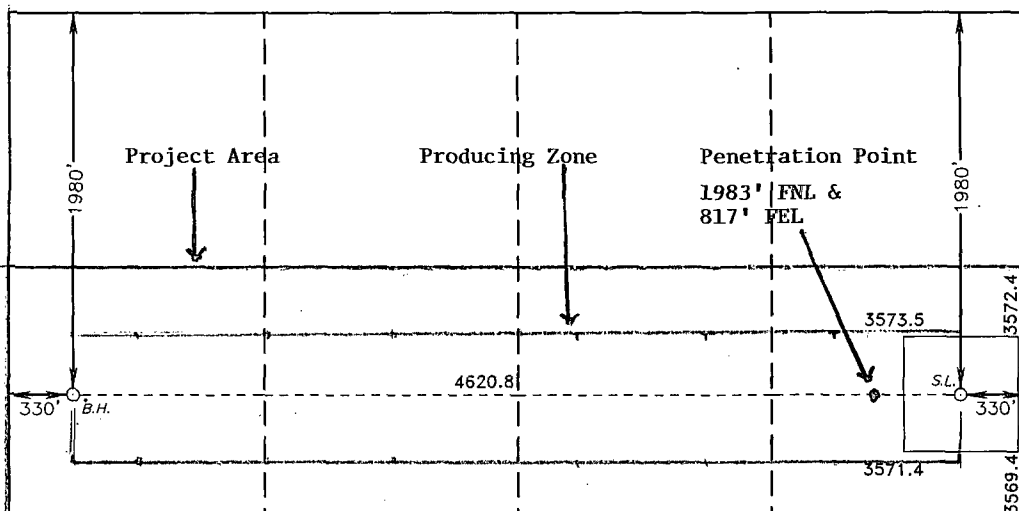
Capitan Controlled Water Basin

Must be in compliance with NMOCD Rule 5.9 prior to placing well on production

Approval Subject to General Requirements & Special Stipulations Attached



SEE ATTACHED FOR
CONDITIONS OF APPROVAL

		<p>OPERATOR CERTIFICATION</p> <p>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 or has a right to drill this well at this 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.</p> <p>Signature: <u>Cy Cowan</u> Date: <u>8/6/12</u></p> <p>Printed Name: <u>Cy Cowan</u></p> <p>Email Address: <u>cy@yatespetroleum.com</u></p>
<p>PROPOSED BOTTOM HOLE LOCATION</p> <p>Lat - N 32°40'36.32"</p> <p>Long - W 103°52'54.75"</p> <p>NMSPCE- N 610230.308</p> <p>E 680247.471</p> <p>(NAD-83)</p>	<p>SURFACE LOCATION</p> <p>Lat - N 32°40'36.41"</p> <p>Long - W 103°52'00.68"</p> <p>NMSPCE- N 610259.033</p> <p>E 684868.165</p> <p>(NAD-83)</p>	
<p>Lease NM-94614</p> <p>SWNW</p>	<p>Lease NM-82902</p> <p>SENW; S2NE</p>	<p>SURVEYOR CERTIFICATION</p> <p>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 supervision, and that the same is true and correct, to the best of my belief.</p> <p>Date Surveyed: <u>APRIL 14, 2012</u></p> <p>Signature & Seal of Professional Surveyor: <u>[Signature]</u></p> <p>Certificate No. <u>Gary L. Jones</u> <u>7977</u></p> <p style="text-align: right;">BASIN SURVEYS 26591</p>

CERTIFICATION
YATES PETROLEUM CORPORATION
Checker BIC 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 6th day of August 2,012

Signature Cy Cowan

Name Cy Cowan

Position Title Land Regulatory Agent

Address 105 South Fourth Street, Artesia, New Mexico 88210

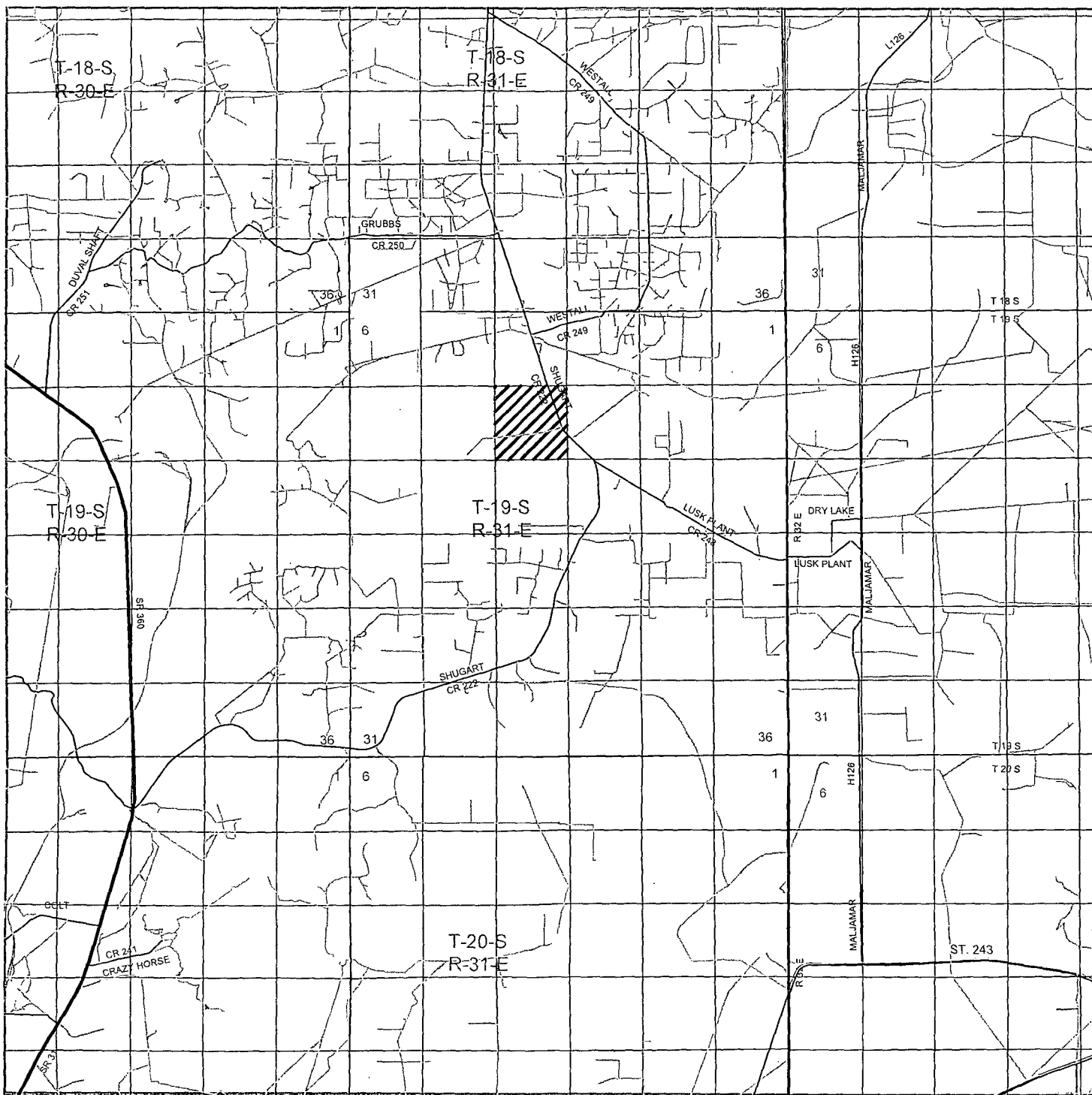
Telephone (575) 748-1471

Field Representative (if not above signatory) Tim Bussell, Drilling Supervisor

Address (if different from above) Same as above.

Telephone (if different from above) (505) 748-4221

E-mail (optional) _____



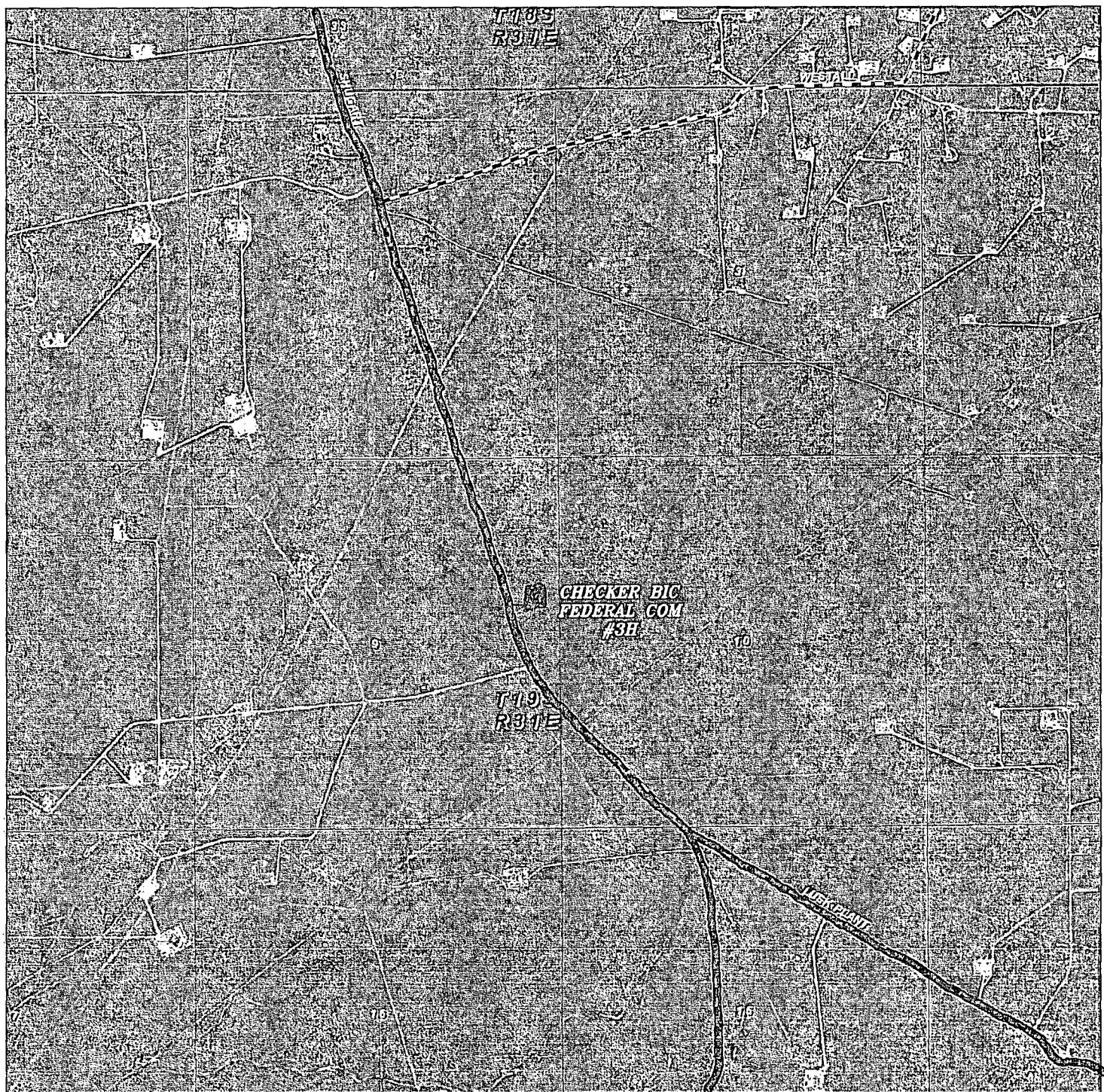
CHECKER BIC FEDERAL COM #3H
 Located 1980' FNL and 330' FEL
 Section 9, Township 19 South, Range 31 East,
 N.M.P.M., Eddy County, New Mexico.

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 26591
 Survey Date: 04-14-2012
 Scale: 1" = 2 Miles
 Date: 04-18-2012

YATES
PETROLEUM
CORP.



CHECKER BIC FEDERAL COM #3H
 Located 1980' FNL and 330' FEL
 Section 9, Township 19 South, Range 31 East,
 N.M.P.M., Eddy County, New Mexico.



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 26591

Scale: 1" = 2000'

YELLOW TINT - USA LAND
 BLUE TINT - STATE LAND
 NATURAL COLOR - FEE LAND

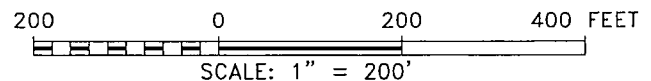
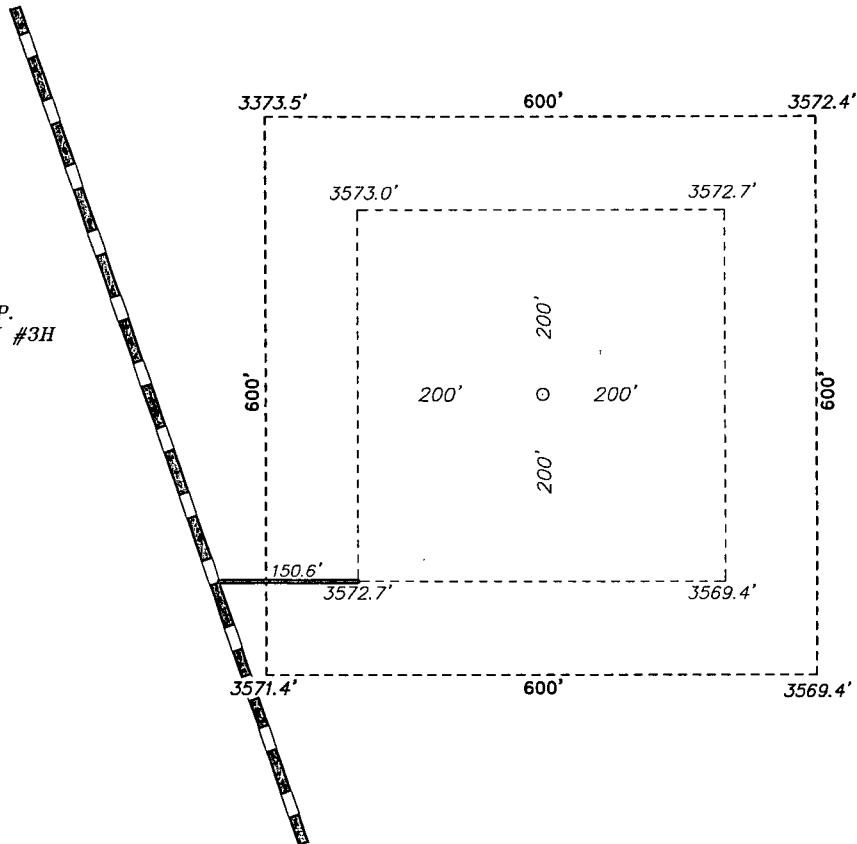
YATES
 PETROLEUM
 CORP.

SECTION 9, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



YATES PETROLEUM CORP.
CHECKER BIC FEDERAL COM #3H
ELEV. - 3574'

Lat - N 32°40'36.41"
Long - W 103°52'00.68"
NMSPEC- N 610259.033
E 684868.165
(NAD-83)



BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 26591 Drawn By: J. SMALL

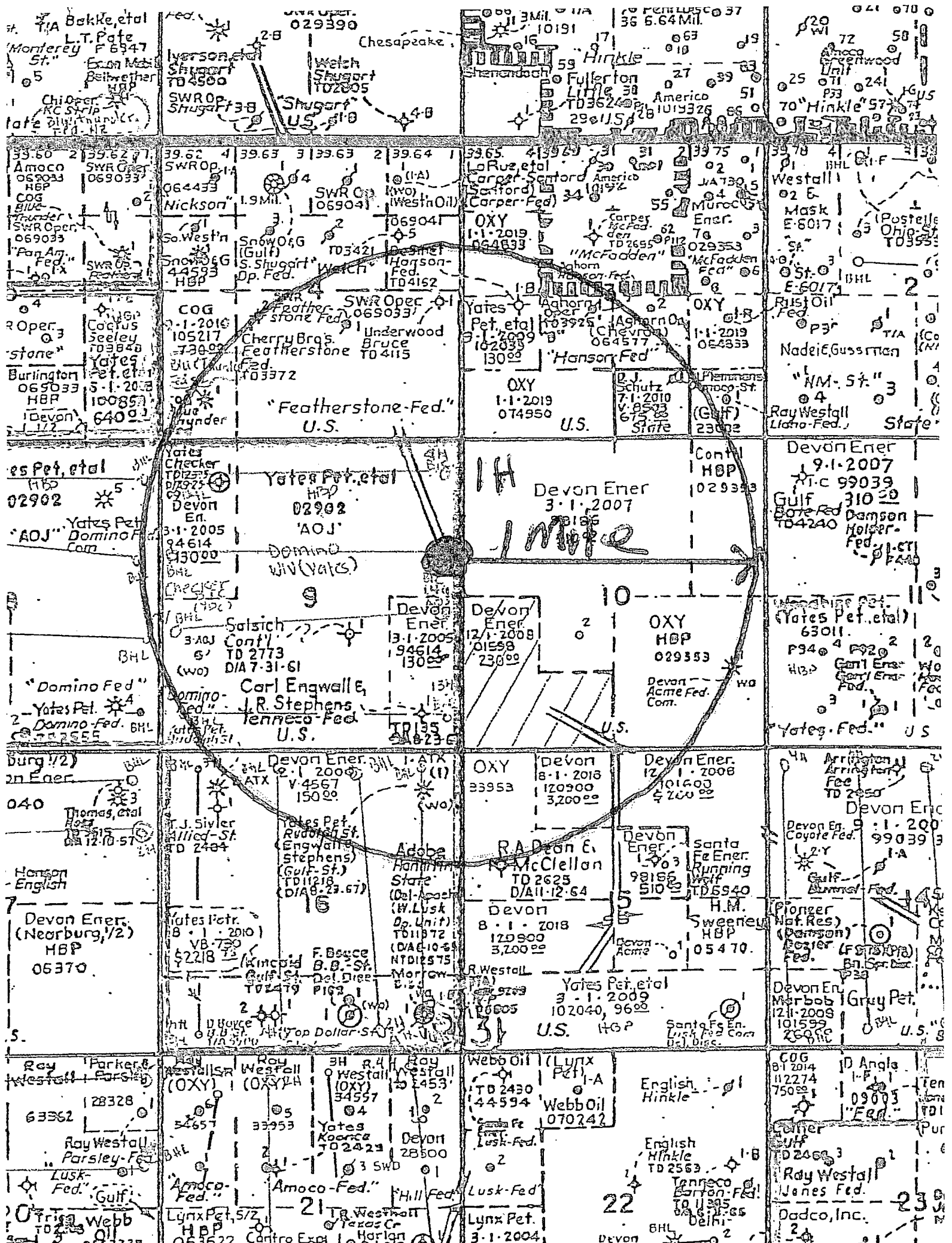
Date: 04-18-2012 Disk: JMS 26591

YATES PETROLEUM CORP.

REF: CHECKER BIC FEDERAL COM #3H / WELL PAD TOPO

THE CHECKER BIC FEDERAL COM #3H LOCATED 1980'
FROM THE NORTH LINE AND 330' FROM THE EAST LINE OF
SECTION 9, TOWNSHIP 19 SOUTH, RANGE 31 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 04-14-2012 Sheet 1 of 1 Sheets



1. Bakke, et al
L.T. Pate
Monterey F 6347
St. 5
Chio Oper
RC Strip
late 2011

2-B
029390
Chesapeake
Iverson
Shugart
102800
SWR
Shugart 38
Shugart
US 510

3 Mil. 10191
Hinkle
Fullerton
America
101926
29115

20
72
58
25
071
241
70
Hinkle 57
US

39.50 2 39.62 71
Amoco SWR Oper
069033
HBP
COG
BUC
Under
SWR Oper
069033
Pan Am
Fed.
1-2019
4
ROper
03
Coetus
Seeley
103840
stone
Yates
Burlington
Pet. et al
069033
HBP
Devon
1-2019
64091

39.62 4 39.63 3 39.63 2 39.64 1
SWR Op
064433
Nickson
1.9 Mil.
So. West'n
Snow O'G
(Gulf)
S. Shugart
Dp. Fed.
44593
HBP
COG
1-1-2019
105217
Cherry Bros.
Featherstone
103372
SWR Oper
069033
Underwood
Bruce
TO 4115
"Featherstone-Fed."
U.S.

39.65 4 39.65 3 39.65 2 39.75 1
LoRuz, et al
Carper-Sanford
Carper-Fed
OXY
1-1-2019
064833
Yates
Pet. et al
1-2019
102839
13000
OXY
1-1-2019
074950
U.S.
Carper
Fed.
TD 2655
"McFadden"
Hagorn
Fed.
OXY
1-1-2019
064577
"Hanson Fed"

39.78 4 39.78 3 39.78 2 39.78 1
Westall
Mask
E-6017
St.
E-6017
BHL
Rust Oil
Fed.
P3
TIA
Nadei, Gussman
"NM. St."
4
Ray Westall
Litho-Fed.
State

es Pet. et al
HBP
02902
Yates Pet.
"AOJ"
Domino Fed.
Com.

Yates Pet. et al
HBP
02902
"AOJ"
Domino
WV (Yates)
Yates
Checker
TD 2255
Devon
En.
3-1-2005
94614
13000
BHL
Checker
(HBP)
Salsich
Cont'l
TD 2773
(wo)
DIA 7-31-61
Carl Engwall
J.R. Stephens
Tenneco Fed.
U.S.

Devon Ener
12-1-2008
194614
13000
OXY
HBP
029353
Devon
Acme Fed.
Com.

Devon Ener
9-1-2007
99039
Gulf
31020
Bore Fed
Damon
Holler
Fed.
1-1-2011
P440
Yates Pet. et al
63011
P94
4
P92
2
HBP
Gartl Ener
Gartl Ener
Fed.
Yates Fed.
U.S.

burg 1/2
2n Ener
040
Thomas, et al
12-10-57
Hanson
English
Devon Ener.
(Nearburg, 1/2)
HBP
06370

Devon Ener.
8-1-2008
V-4567
15000
Yates Pet.
Rudolph St.
Engwall
Stephens
(Gulf St.)
TD 1218
(DIA 8-23-67)
Adobe
Hankin
State
(Del. Apach
(W. Lusk
Dp. Unit)
TD 11872
(DIA 10-15-55)
NTD 12575
Morrow
Bis
Yates Pet.
8-1-2018
120900
3,20000
Devon
8-1-2018
120900
3,20000
R.A. Dean &
McClellan
TD 2625
D/A 11-12-64
Devon
8-1-2018
120900
3,20000
R Westall
Yates Pet. et al
3-1-2009
102040, 9600
U.S.
HBP

Devon Ener.
12-1-2008
101603
5,20000
Devon Ener.
1-2013
98186
51000
Santa
Fe Ener.
Running
1-2013
TD 6940
H.M.
Sweeney
HBP
05470
Devon
Acme
Yates Pet. et al
3-1-2009
102040, 9600
U.S.
HBP

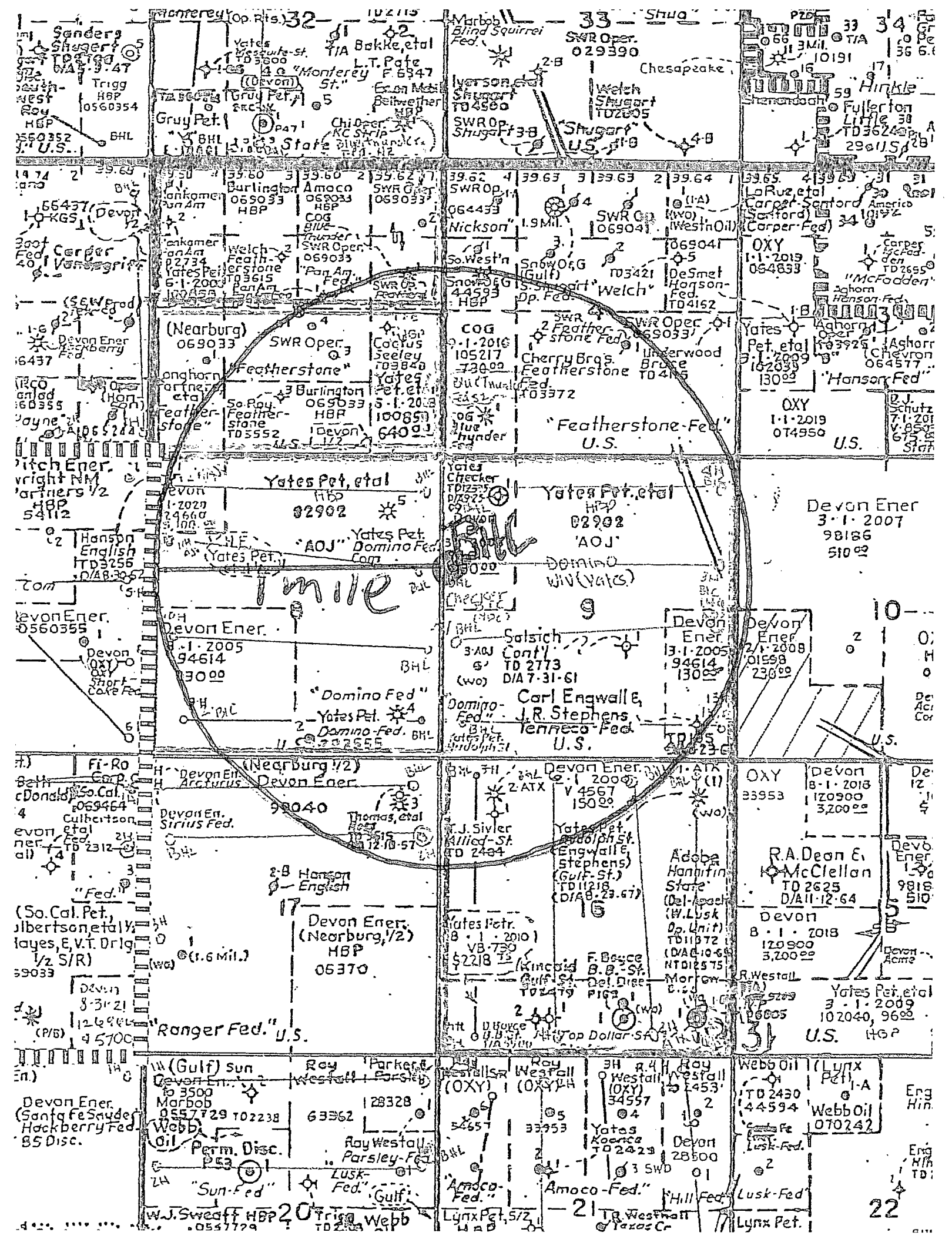
Arrington
Arrington
Fed.
TD 2650
Devon Ener
1-1-2009
99039
Coyote Fed.
1-2013
1-2013
Gulf
Summit Fed.
Pioneer
Hof. Res.
(Damon)
Foster
Fed.
Devon Ener
Marbob
12-1-2008
101599
26000
Gray Pet.
U.S.

Ray Westall
Parsley
63362
128328
Ray Westall
Parsley Fed.
Lusk
Fed.
Gulf
Webb
10223
Oil

Ray Westall
(OXY)
34557
Yates
Koorca
TD 2423
Devon
28500
Amoco-Fed.
Hill Fed.
Lusk Fed.
Lynx Pet.
3-1-2004

Webb Oil
(Lynx
Pet)
1-A
TD 2430
44594
Webb Oil
070242
English
Hinkle
TD 2563
Tenneco
Barton Fed.
101395
Belhi
22
BHL
Devon

COG
8-1-2014
112274
75000
ID Angla
1-1-1
09003
"Fed."
Ray Westall
Jones Fed.
Dadco, Inc.
23



YATES PETROLEUM CORPORATION

Checker "BIC" Federal Com #3H
1980' FNL & 330' FEL, Surface Hole
1980' FNL & 330' FWL, Bottom Hole
Section 9 -T19S-R31-E
Eddy County, New Mexico

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

Rustler	677'	Bone Springs	6702' Oil	
Top of Salt	927'	1 st Bone Spring	8057' Oil	
Bottom of Salt	2247'	Avalon Sands	6972'	
Tansill	2317'	Middle Avalon Sand	7302'	
Yates	2517' Oil	Lower Avalon Sands	7582'	
Seven Rivers	2707'	KOP	8542'	
Queen	3607' Oil	2 nd Bone Spring	8772' Oil	8782' MD
Capitan Reef	4567'	Target Zone SBSG	9019' Oil	9299' MD
Cherry Canyon	4907' Oil	TD	8952'	13436' MD
Brushy Canyon	5192' Oil			

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

Water: Approx 250' - 350'
Oil or Gas: See above--All Potential Zones

3. Pressure Control Equipment: A 3000 PSI BOPE with a 13 5/8" opening will be installed on the 13 3/8" casing. A 5000 PSI BOPE with an 11" opening will be installed on the 9 5/8" casing. BOPE Preventers and equipment will be tested to the pressure approved in the APD. Tests will be conducted by an independent tester utilizing a test plug in the well head. Tests will be held for 10 minutes on each segment of the system tested. Any leaks will be repaired at the time of the test. Annular preventer will be tested to 50% of rated working pressure. Pressure tests to 3000 PSI and held for 30 minutes 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:

- A. Casing Program: (All New)

HOLE SIZE	CASING SIZE	WT/FT	GRADE	COUPLING	INTERVAL	LENGTH
17 1/2"	13 3/8"	48#	H-40 / J-55 Hybrid	ST&C	0'- 702'	702' 725'
12 1/4"	9 5/8"	40#	HCK-55	LT&C	0'-80'	80'
12 1/4"	9 5/8"	36#	J-55 / K-55	LT&C	80'-3200'	3120'
12 1/4"	9 5/8"	40#	HCK-55	LT&C	3200'- 4880' 4500'	1680' 1500'
8 3/4"	5 1/2"	17#	P-110	Buttress	0'-9299'	9299'
8 1/2"	5 1/2"	17#	P-110	Buttress	9299'-13436'	4137'

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

B. CEMENTING PROGRAM:

Surface casing: 13 3/8" From 0-702' lead with 430 sacks Class H with 2% CaCl₂ Expanding Agent 10.0% BWOB (Wt. 14.20 Yld. 1.62). Tail in with 200 sacks Class C 2% CaCl₂. (Wt 14.80 Yld 1.34) Cement designed with 100% excess. TOC=Surface.

Intermediate Casing: 9 5/8" Stage 1: From 3550'-4880' lead with 280 sacks 35:65:6PzC (Wt. 12.50 Yld 2.00); Tail in with 200 sacks Class C with 2% CaCl₂ (Wt. 14.80 Yld 1.34). Cement designed with 100% excess. TOC=Surface

Stage 2: From 0-3550' lead with 970 sacks 35:65:6PzC (WT 12.50 Yld 2.00) Tail in with 200 sacks Class C with 2% CaCl₂ (Wt 14.80 Yld 1.34). Cement designed with 100% excess. TOC=Surface

Production Casing: Cement to be done in two stages with DV cementer tools at approximately 6600'.

Production Casing 5 1/2" Stage 1 From 13436' to 6600' lead with 1655 sacks Pecos VILt with D112, Fluid Loss 0.4%; D151, Calcium Carbonate, 22.5 lb/sack' D-174, Extender 1.5 lb/sack; D-177, Retarder 0.01 lb/sack; D-800, Retarder 0.5 lb/sack and D46, Antifoam Agent, 0.15 lb/sack (Wt. 13.00 Yld. 1.41). Cement designed with 35% excess. TOC=6600'.

Stage 2 From 6600' to 3000' lead with 475 sacks 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail In with 200 sacks Pecos VILt with D112, Fluid Loss 0.4%; D151, Calcium Carbonate, 22.5 lb/sack' D-174, Extender 1.5 lb/sack; D-177, Retarder 0.01 lb/sack; D-800, Retarder 0.5 lb/sack and D46, Antifoam Agent, 0.15 lb/sack (Wt. 13.00 Yld. 1.41). Cement designed with 35% excess. TOC=3000'.

Well will be drilled vertically to 8542' and kicked off at approximately 8542' The well will then be directionally drilled at 12 degrees per 100' with an 8 3/4" hole to 9299' MD (9019' TVD). At this point, reduce the hole size to 8 1/2" and drill to 13436' MD (8952' TVD). 5 1/2" casing will then be set and cemented in two stages with a DV tool at approximately 6600'. Penetration point of producing zone will be encountered at 1983' FNL & 815' FEL, Section 9-T19S-31E. Deepest TVD in the well will be 9019' in the lateral.

5. Mud Program and Auxiliary Equipment:

INTERVAL	TYPE	WEIGHT	VISCOSITY	FLUID LOSS
0'-702'	Fresh Water	8.60-9.20	28-34	N/C
702'-4880'	Brine Water	10.00-10.20	28-30	N/C
4880'-13436'	Cut Brine	8.80-9.20	30-36	N/C

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 foot samples 3000' to TD.
Logging: Platform/HLRA/CMR from into the curve to surface casing. Horizontal-MWD-GR.
Coring: None
DST's: None
Mudlogging: On from 3000' to TD

7. Abnormal Conditions, Bottom hole pressure and potential hazards:

Anticipated BHP: Depths are TVD.

From: 0	TO: 702'	Anticipated Max. BHP:	336	PSI
From: 702'	TO: 4880'	Anticipated Max. BHP:	2588	PSI
From: 4880'	TO: 9019'	Anticipated Max. BHP:	4315	PSI

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None

8. ANTICIPATED STARTING DATE:

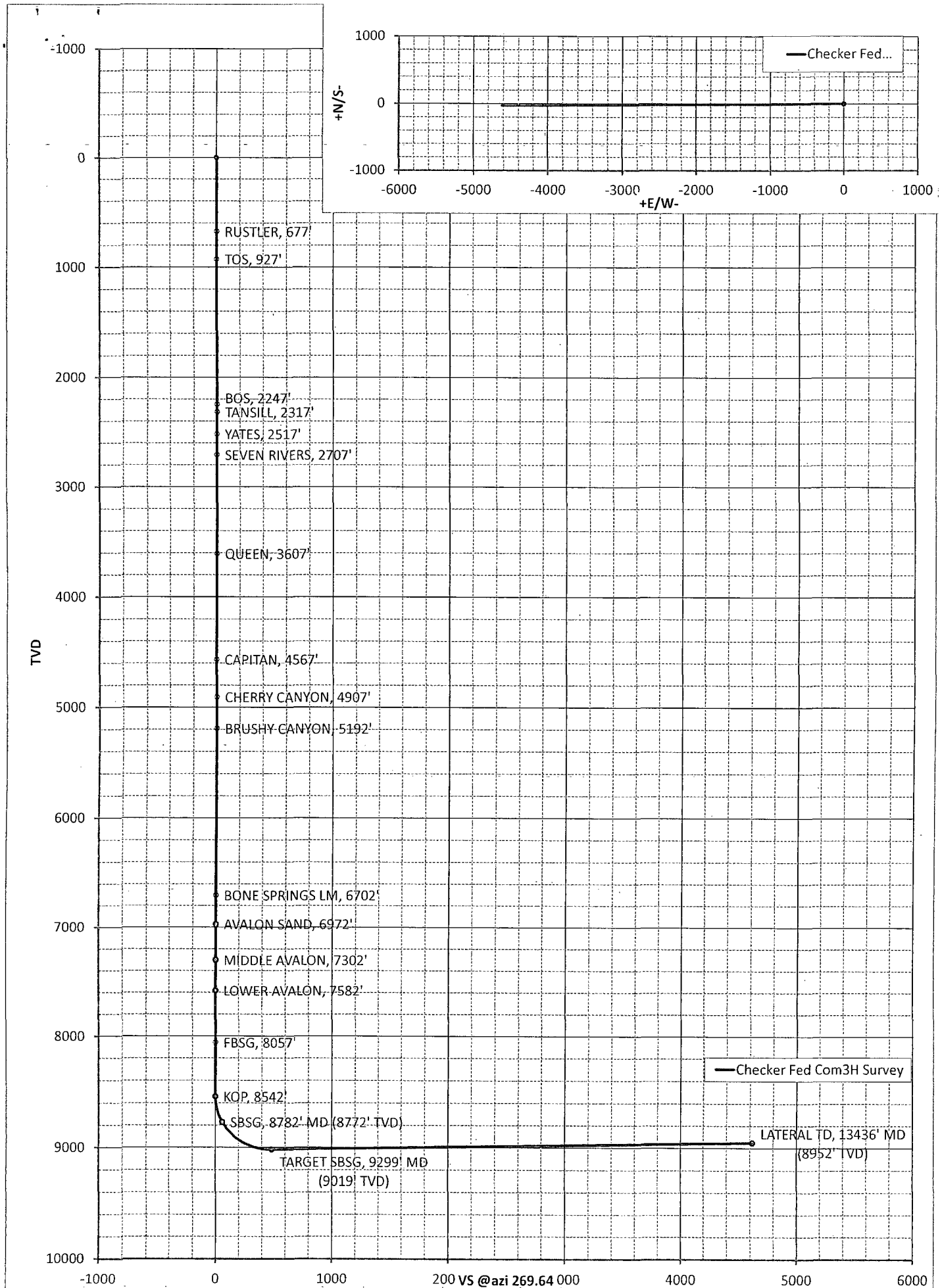
Plans are to drill this well as soon as possible after receiving approval. It should take approximately 60 days to drill the well with completion taking another 20 days.

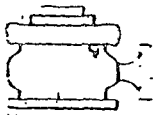
Operator Co.

Your Co.

Survey/Planning Report									
Operator	Yates Petroleum Corp.			Northing			Date	28-Mar-13	
Dir. Co.	Yates Petroleum Corp.			Easting			System	2 - St. Plane	
Well Name	Checker Fed Com3H Survey			Elevation			Datum	1983 - NAD83	
Location	Sec. 9, 19S-31E			Latitude			Zone	4302 - Utah Central	
Rig				Longitude			Scale Fac.		
Job				Units	Feet		Converg.		
MD	INC	AZI	TVD	+NS-	+EW-	VS@269.64°	BR	TR	DLS
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
677.00	0.00	360.00	677.00	0.00	0.00	0.00	0.00	0.00	0.00
677' RUSTLER, 677'									
927.00	0.00	360.00	927.00	0.00	0.00	0.00	0.00	0.00	0.00
927' TOS, 927'									
2247.00	0.00	360.00	2247.00	0.00	0.00	0.00	0.00	0.00	0.00
2247' BOS, 2247'									
2317.00	0.00	360.00	2317.00	0.00	0.00	0.00	0.00	0.00	0.00
2317' TANSILL, 2317'									
2517.00	0.00	360.00	2517.00	0.00	0.00	0.00	0.00	0.00	0.00
2517' YATES, 2517'									
2707.00	0.00	360.00	2707.00	0.00	0.00	0.00	0.00	0.00	0.00
2707' SEVEN RIVERS, 2707'									
3607.00	0.00	360.00	3607.00	0.00	0.00	0.00	0.00	0.00	0.00
3607' QUEEN, 3607'									
4567.00	0.00	360.00	4567.00	0.00	0.00	0.00	0.00	0.00	0.00
4567' CAPITAN, 4567'									
4907.00	0.00	360.00	4907.00	0.00	0.00	0.00	0.00	0.00	0.00
4907' CHERRY CANYON, 4907'									
5192.00	0.00	360.00	5192.00	0.00	0.00	0.00	0.00	0.00	0.00
5192' BRUSHY CANYON, 5192'									
6702.00	0.00	360.00	6702.00	0.01	0.00	0.00	0.00	0.00	0.00
6702' BONE SPRINGS LM, 6702'									
6972.00	0.00	360.00	6972.00	0.01	0.00	0.00	0.00	0.00	0.00
6972' AVALON SAND, 6972'									
7302.00	0.00	360.00	7302.00	0.01	0.00	0.00	0.00	0.00	0.00
7302' MIDDLE AVALON, 7302'									
7582.00	0.00	360.00	7582.00	0.01	0.00	0.00	0.00	0.00	0.00
7582' LOWER AVALON, 7582'									
8057.00	0.00	360.00	8057.00	0.01	0.00	0.00	0.00	0.00	0.00
8057' FBSG, 8057'									
8541.73	0.00	269.64	8541.73	0.01	0.00	0.00	0.00	3.16	0.00
8541.73' KOP, 8542'									
8600.00	6.99	269.64	8599.86	-0.01	-3.55	3.55	12.00	0.00	12.00
8700.00	18.99	269.64	8697.12	-0.15	-25.99	25.99	12.00	0.00	12.00
8782.01	28.83	269.64	8771.99	-0.36	-59.19	59.20	12.00	0.00	12.00
8782.01' SBSG, 8782' MD (8772' TVD)									
8800.00	30.99	269.64	8787.59	-0.42	-68.17	68.17	12.00	0.00	12.00
8900.00	42.99	269.64	8867.31	-0.79	-128.23	128.23	12.00	0.00	12.00
9000.00	54.99	269.64	8932.81	-1.26	-203.55	203.56	12.00	0.00	12.00
9100.00	66.99	269.64	8981.21	-1.80	-290.85	290.85	12.00	0.00	12.00
9200.00	78.99	269.64	9010.41	-2.39	-386.30	386.30	12.00	0.00	12.00
9299.48	90.93	269.64	9019.13	-3.01	-485.21	485.21	12.00	0.00	12.00
9299.48' TARGET SBSG, 9299' MD (9019' TVD)									
13435.59	90.93	269.64	8952.00	-28.72	-4620.69	4620.78	0.00	0.00	0.00
13435.59' LATERAL TD, 13436' MD (8952' TVD)									



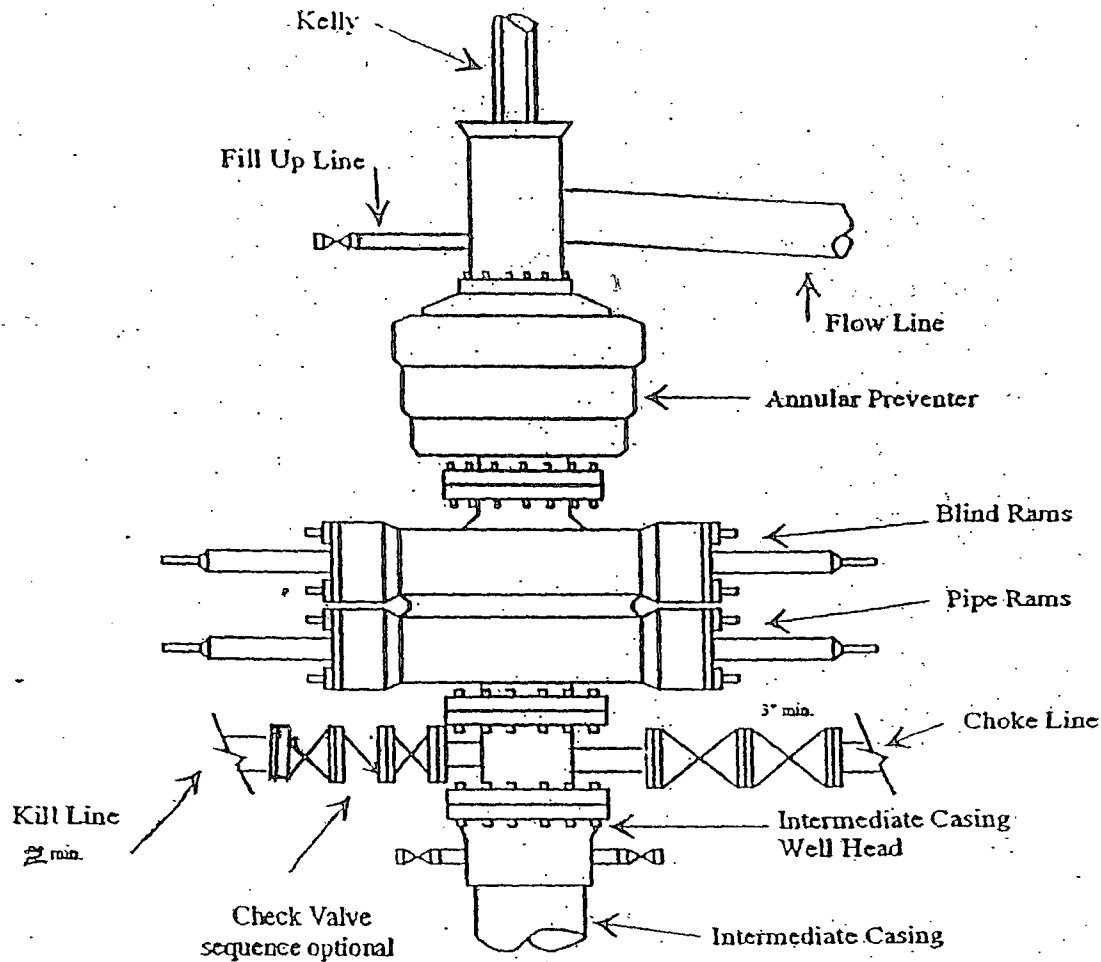




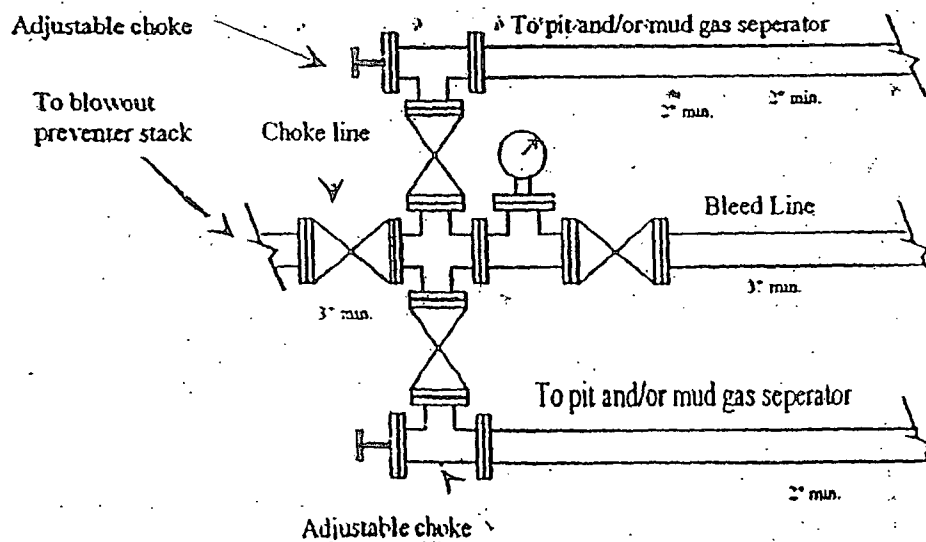
Yates Petroleum Corporation
Typical 3,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack

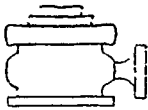
BOP-3

EXHIBIT



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

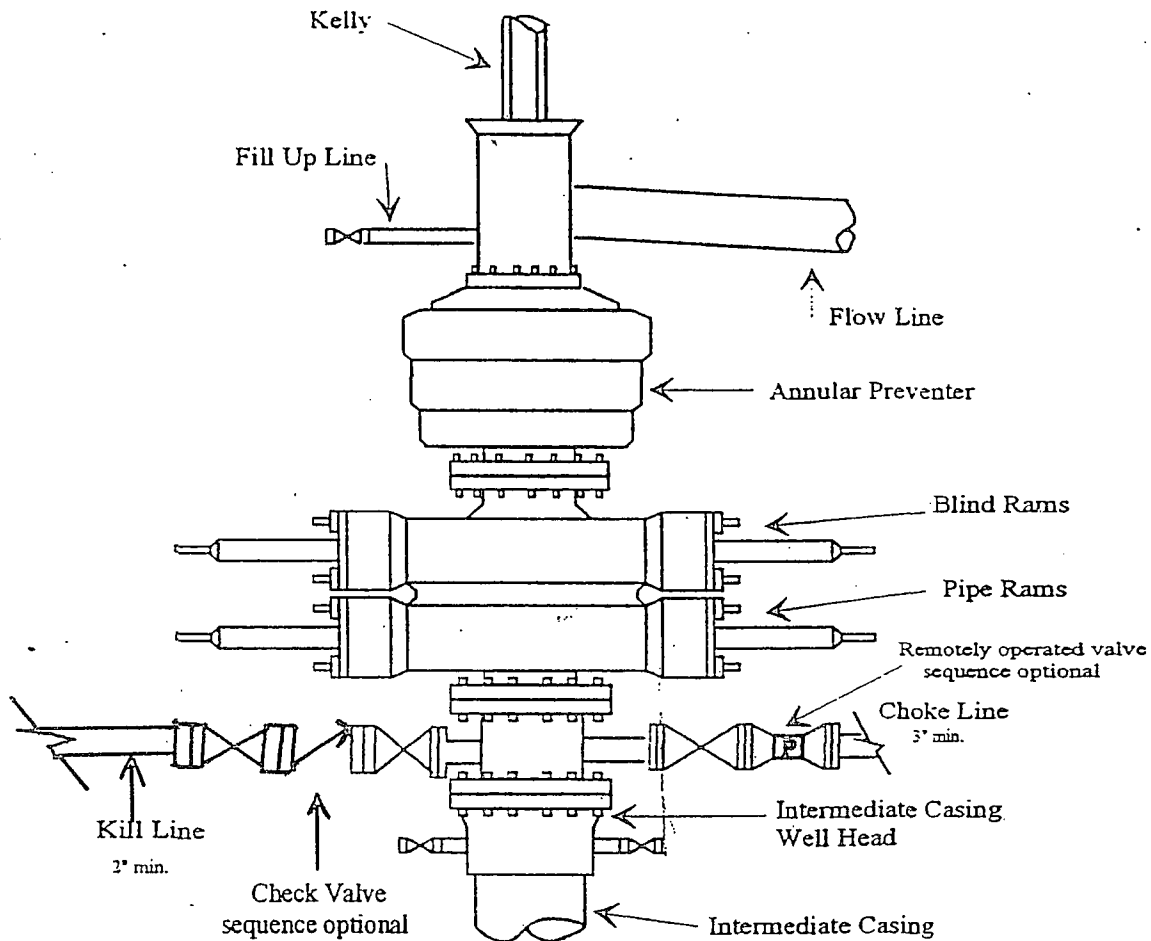




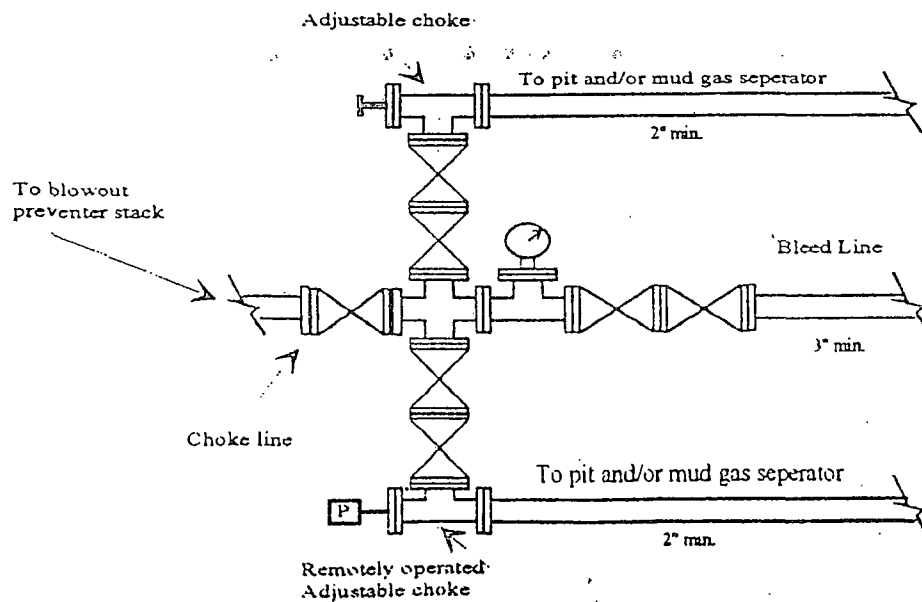
Yates Petroleum Corporation
Typical 5,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack

BOP-4

Exhibit

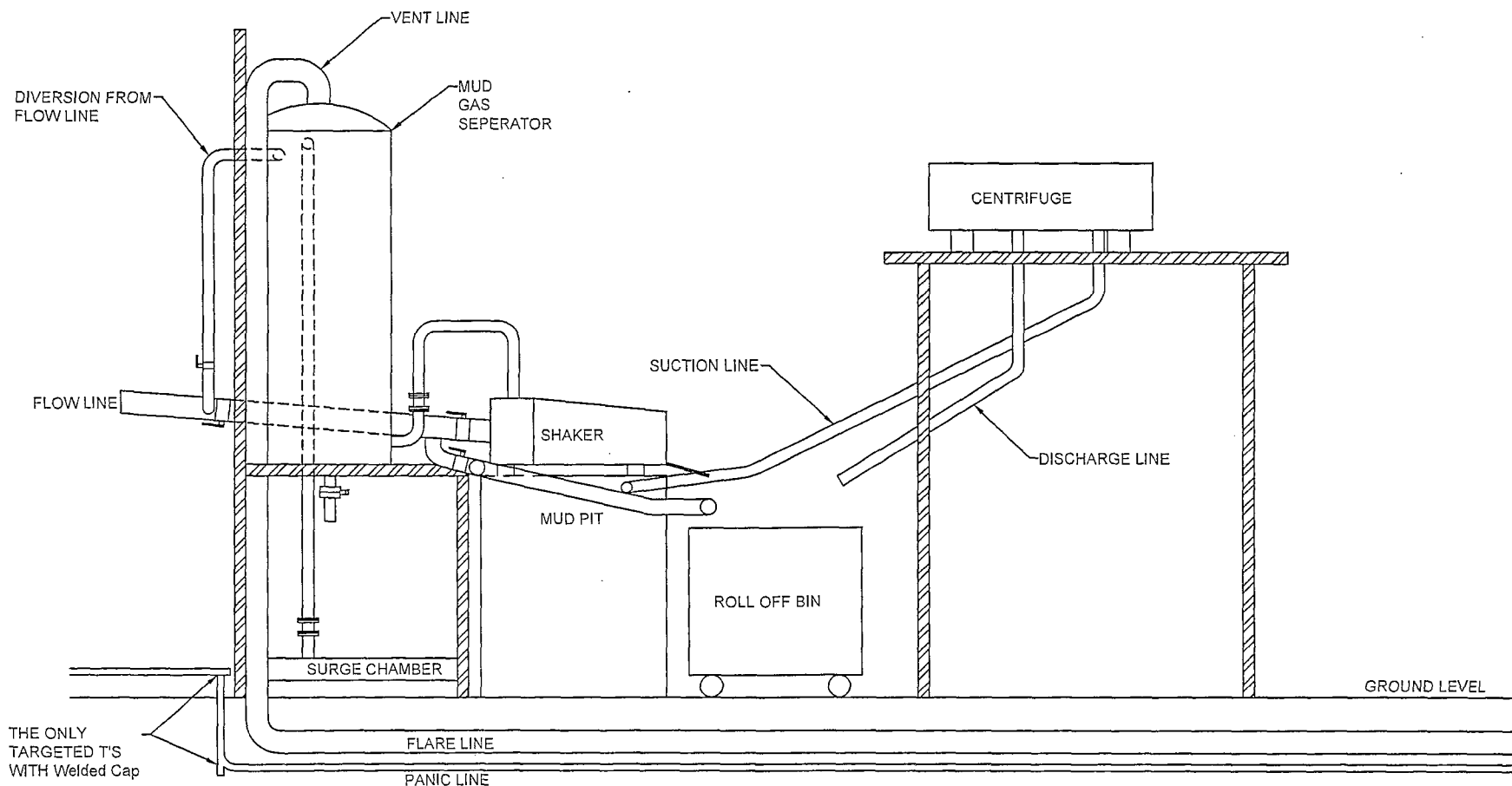


Typical 5,000 psi choke manifold assembly with at least these minimum features



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.

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6181 Fax: (575) 393-0720

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210
Phone (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
		Undesignated Bone Spring
Property Code	Property Name	Well Number
	CHECKER BIC FEDERAL COM	3H
OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORP.	3574'

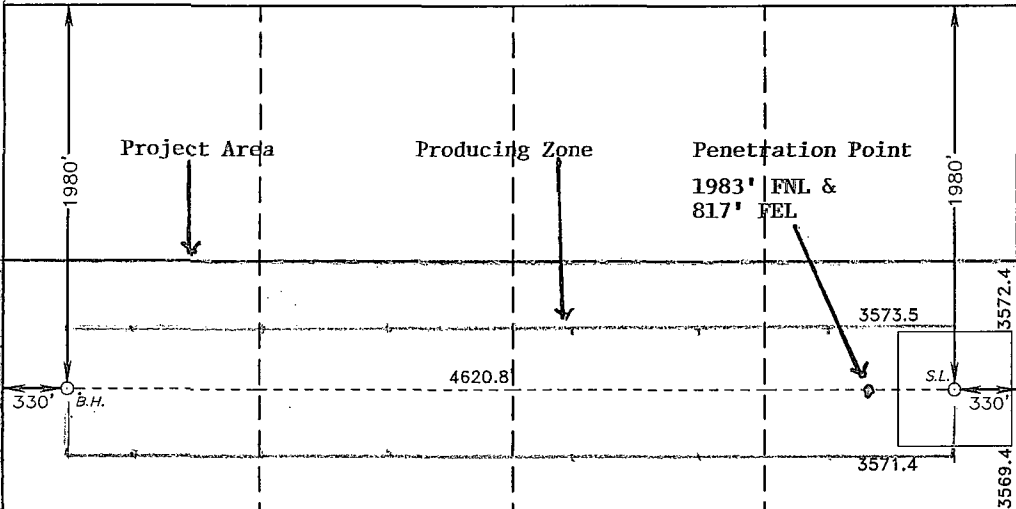
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	9	19 S	31 E		1980	NORTH	330	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	9	19 S	31 E		1980	NORTH	330	WEST	EDDY
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
160 S2N2									

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

	<p>OPERATOR CERTIFICATION</p> <p>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 or has a right to drill this well at this 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.</p> <p>Signature: <u>Cy Cowan</u> Date: <u>8/6/12</u></p> <p>Printed Name: <u>Cy Cowan</u></p> <p>Email Address: <u>cy@yatespetroleum.com</u></p>
<p>PROPOSED BOTTOM HOLE LOCATION</p> <p>Lat - N 32°40'36.32" Long - W 103°52'54.75" NMSPCE- N 610230.308 E 680247.471 (NAD-83)</p> <p>Lease NM-94614 SWNW</p>	<p>SURFACE LOCATION</p> <p>Lat - N 32°40'36.41" Long - W 103°52'00.68" NMSPCE- N 610259.033 E 684868.165 (NAD-83)</p> <p>Lease NM-82902 SENW, S2NE</p>

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 supervision, and that the same is true and correct to the best of my belief.

Date Surveyed: APRIL 14, 2012

Signature & Seal of Professional Surveyor: GARY L. JONES

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 26591

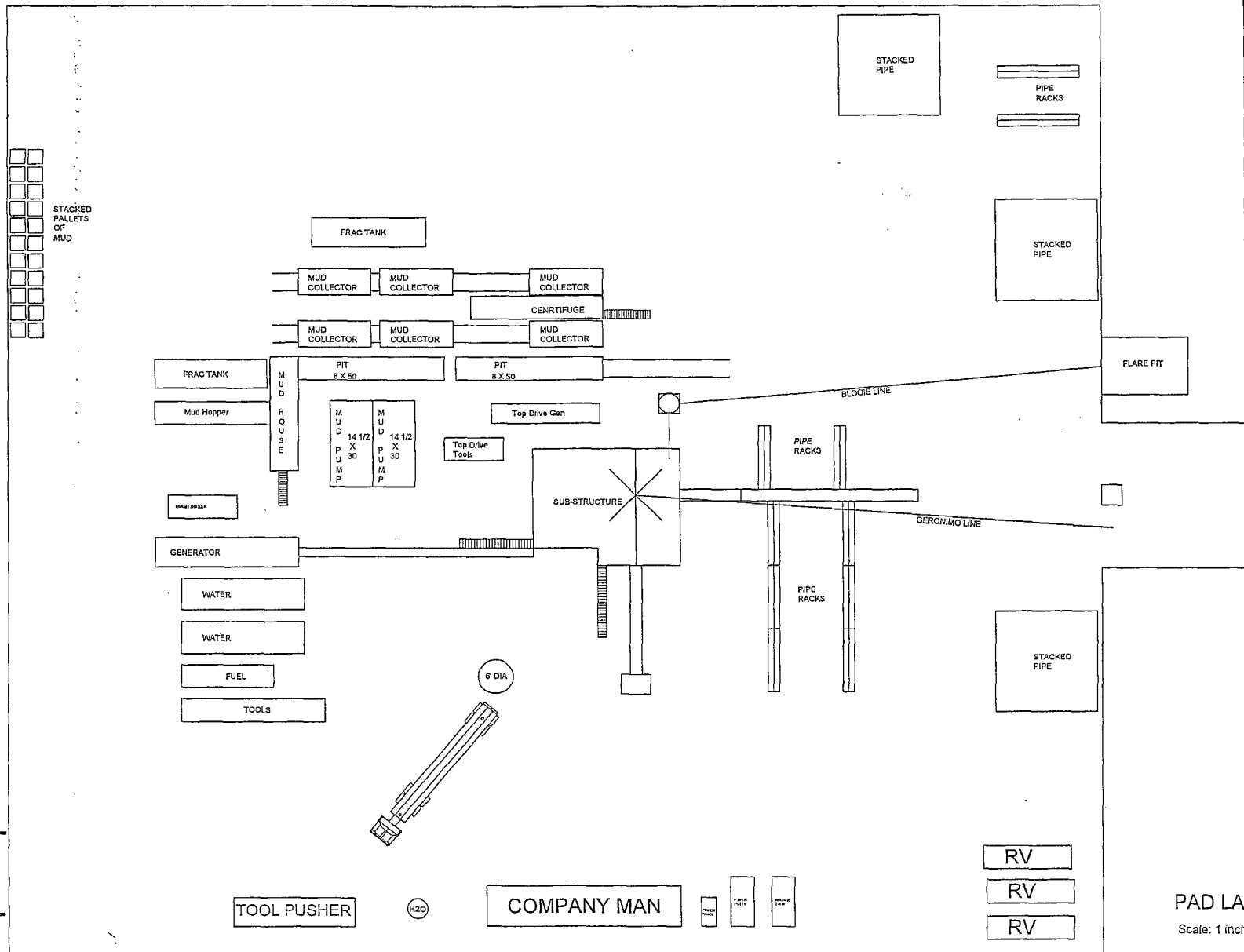
YATES PETROLEUM CORPORATION

Exhibit

425.00

330

ROAD



PAD LAYOUT

Scale: 1 inch = 50 feet

Yates Petroleum Corporation

105 S. Fourth Street
Artesia, NM 88210

Hydrogen Sulfide (H₂S) Contingency Plan

For

Checker BIP Federal Com. #3H

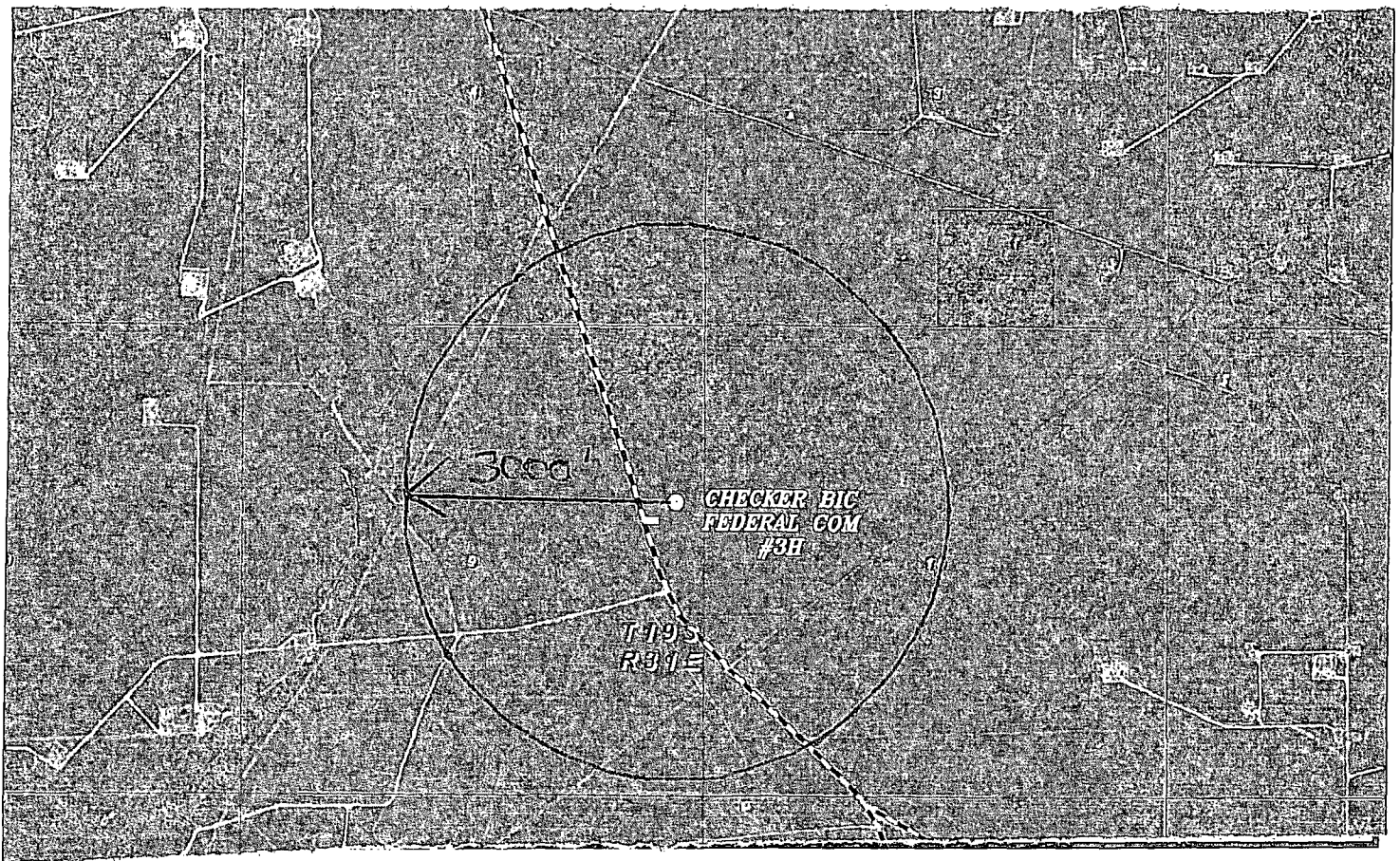
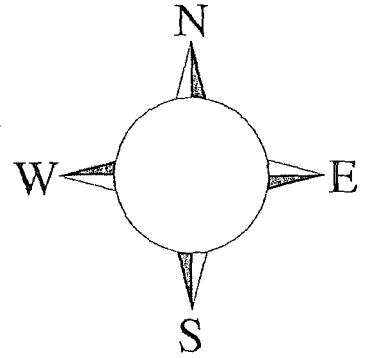
1980' FNL and 330' FEL

Section 9, T19S,-R31E

Eddy County, NM

Checker BIP Federal Com. #3H

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.



Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the case of a release of gas containing H₂S, 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 H₂S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H₂S 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

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

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
Pinson Mc Whorter/Operations Manager	(575) 748-4189
Wade Bennett/Prod Superintendent	(575) 748-4236
LeeRoy Richards/Assistant Prod Superintendent	(575) 748-4228
Mike Larkin/Drilling	(575) 748-4222
Paul Hanes/Prod. Foreman/Roswell	(575) 624-2805
Tim Bussell/Drilling Superintendent	(575) 748-4221
Artesia Answering Service	(575) 748-4302
(During non-office hours)	

Agency Call List

Eddy County (575)

Artesia

State Police	746-2703
City Police.....	746-2703
Sheriff's Office	746-9888
Ambulance	911
Fire Department	746-2701
LEPC (Local Emergency Planning Committee)	746-2122
NMOCD.....	748-1283

Carlsbad

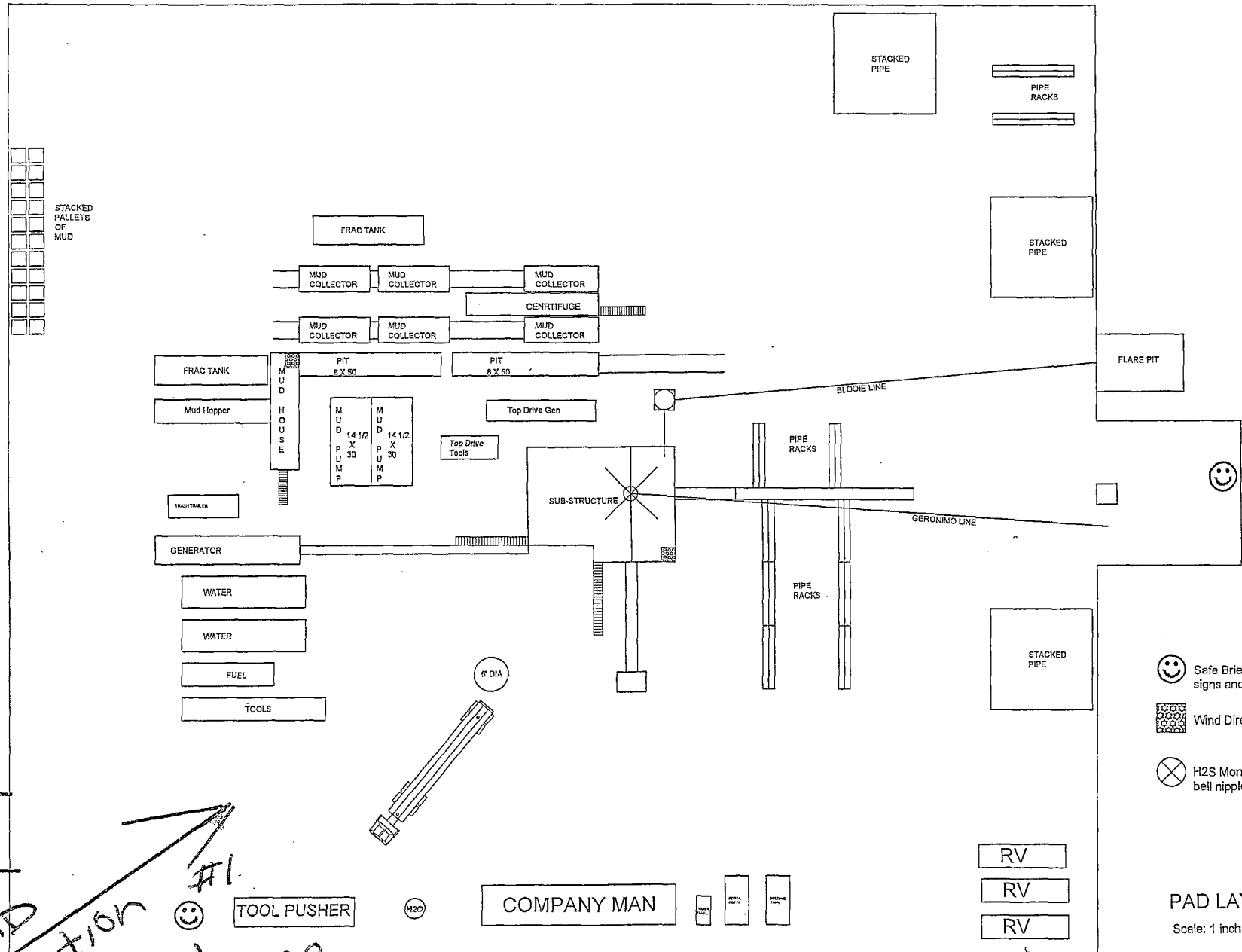
State Police	885-3137
City Police.....	885-2111
Sheriff's Office	887-7551
Ambulance	911
Fire Department	885-2111
LEPC (Local Emergency Planning Committee).....	887-3798
US Bureau of Land Management.....	887-6544
New Mexico Emergency Response Commission (Santa Fe)	(505)476-9600
24 HR	(505) 827-9126
New Mexico State Emergency Operations Center.....	(505) 476-9635
National Emergency Response Center (Washington, DC)(800) 424-8802

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

Flight For Life -4000 24th St, Lubbock, TX	(806) 743-9911
Aerocare -Rr 3 Box 49f, Lubbock, TX	(806) 747-8923
Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM	(505) 842-4433
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM	(505) 842-4949

YATES PETROLEUM CORPORATION



#2 Drilling Company Says it's Here!

- ☺ Safe Briefing Area with caution signs and breathing equipment
- ☒ Wind Direction Indicators
- ⊗ H2S Monitor with alarm at the bell nipple

PAD LAYOUT
Scale: 1 inch = 50 feet

ROAD

WIND Direction ☺
375' to FLARE PIT?

Foot Path

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:

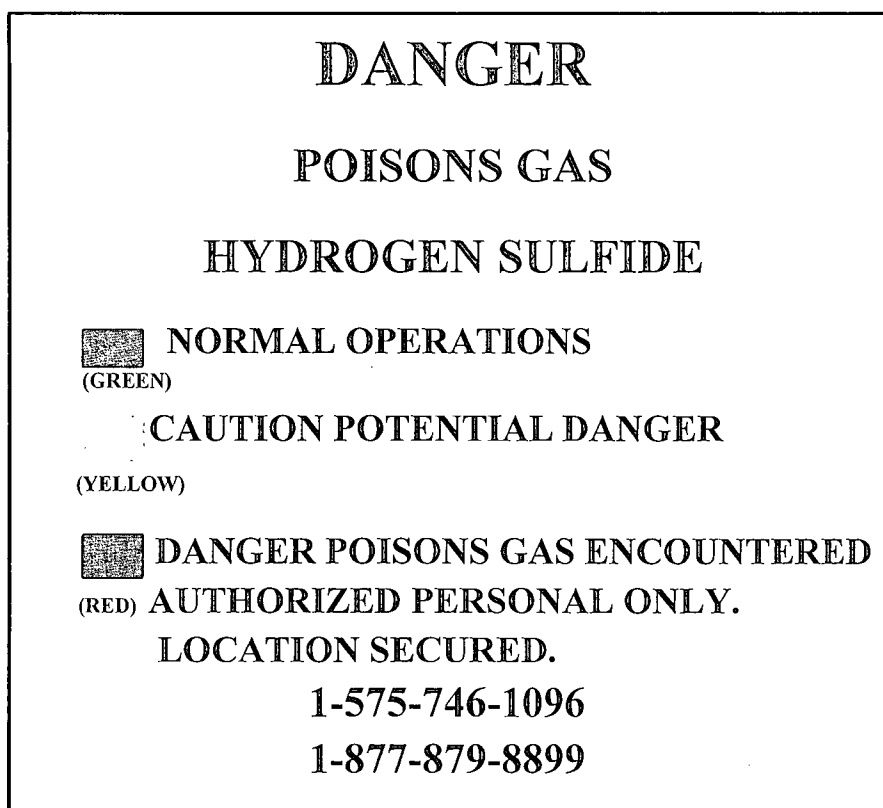
- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- B. All elastomers used for packing and seals shall be H2S trim.

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.

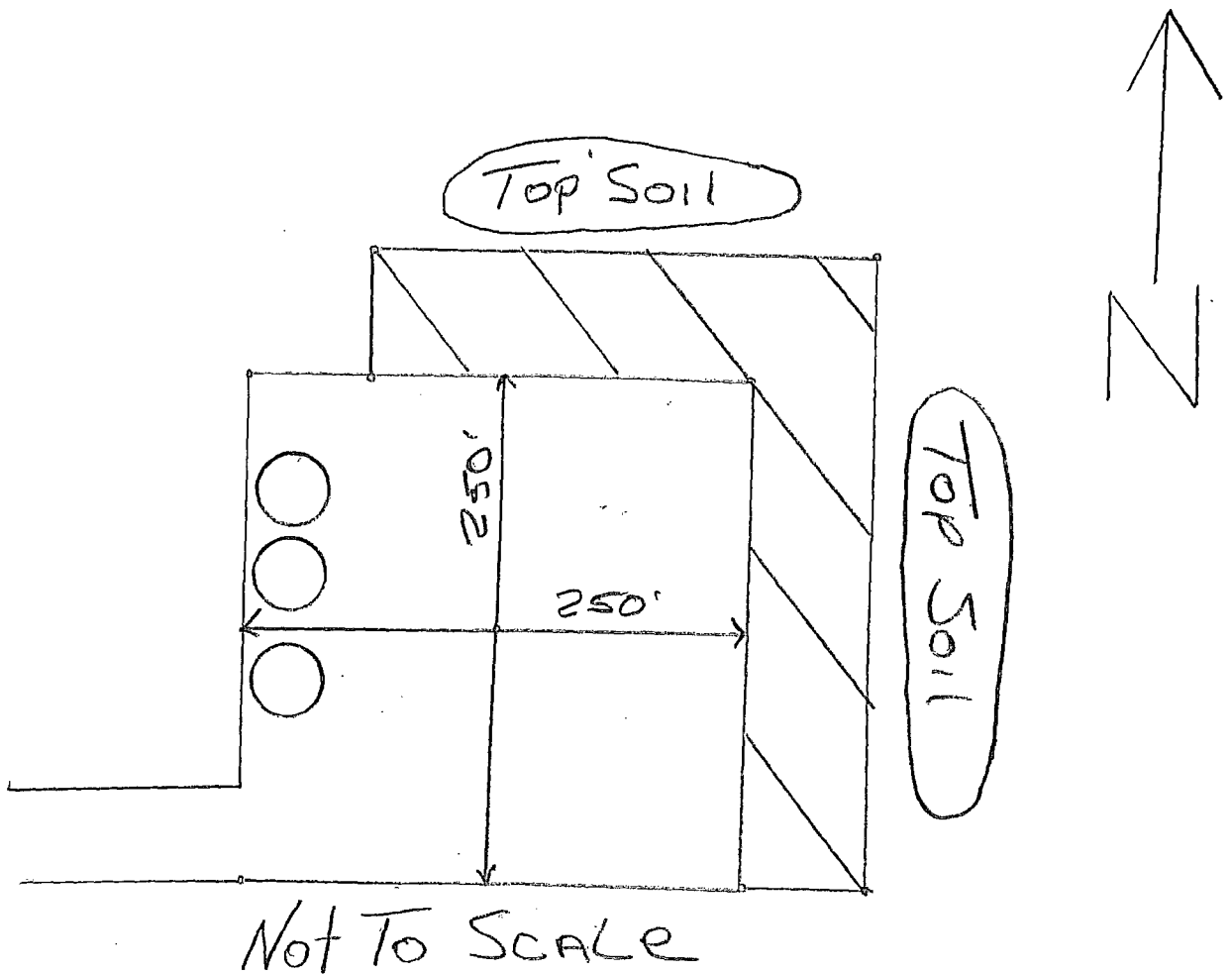
EXHIBIT**EDDY COUNTY EMERGENCY NUMBERS**

ARTESIA FIRE DEPT. 575-746-5050
ARTESIA POLICE DEPT. 575-746-5000
EDDY CO. SHERIFF DEPT. 575-746-9888

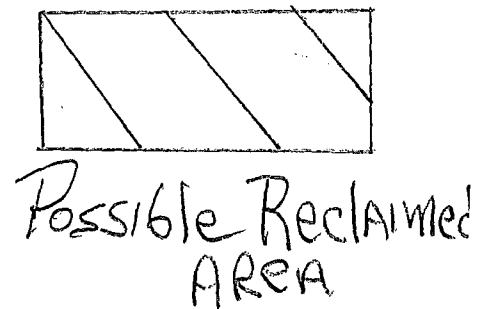
LEA COUNTY EMERGENCY NUMBERS

HOBBS FIRE DEPT. 575-397-9308
HOBBS POLICE DEPT. 575-397-9285
LEA CO. SHERIFF DEPT. 575-396-1196

Reclamation PLAT



PLEASE Note:
FINAL Reclaimed
Area may look
Different than
THIS PLAT.



Plans for Interim and Final Surface Reclamation.

1. Well location will be contoured to resemble the original topography as closely as possible. Surface reclamation measures will be taken to avoid new erosion on the well location and the area surrounding the well location. These measures will be overseen by Yates' personnel following a structured plan for the reclamation of each individual site.
2. Major drainage systems will be avoided as determined at the onsite with the BLM. Minor drainages may be rerouted around the well site within the 600' x 600' cleared area to avoid moving the well location.
3. Segregation of topsoil or like soils will be placed in low lift rows rather than in a stockpile just off the caliche well pad. Placement of these lift rows will be determined at the BLM onsite or at the time of construction by Yates Personnel.
4. Yates will use prudent oil field practices when constructing well locations and related facilities. Yates personnel will determine the size of the well location needed for safe working conditions for personnel during all aspects on the drilling and production process.
5. Back fill requirements for above ground reserve pits will be met by using cut, fill, and contouring of available top soil and like soils from the pit area. Should additional material be needed it will be brought in from a BLM approved source.
6. All topsoil will be spread over the area reclaimed during interim reclamation using a front end loader. For final reclamation enough topsoil will be evenly distributed between the interim reclaimed area and the final reclaimed area. This method of soil stabilization should help maintain the productivity and viability of the topsoil.
7. Soil treatments will be determined at the time of final reclamation by Yates' Environmental Specialist or other designated personnel to meet BLM final reclamation goals.
8. Reseeding of disturbed areas will be accordance with the seed mixtures attached to the approved APD as Conditions of Approval. Planting and soil preparation will be done during the rainy season between June 1st and September 1st.
9. Yates' personnel will control weeds during the productive period through final abandonment of the well. Yates may also use the option to hire a third party to be in charge of weed control or participate in the Chaves Soil and Water District program to pool monies for weed control.
10. Well pads, roads and related facilities with caliche or other surfacing material will be picked up or turned over at the time of final abandonment. These materials may be used on other projects in the area if possible or placed back in the caliche pit or other designated site. Buried pipelines will be left in place after being bled down and purged. Above surface support equipment will be removed or cut down below plow depth and removed. Pipeline right-of-ways will be reseeded according to BLM Best Management Practices.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation

Checker BIC Federal Com. #3H

1980' FNL & 330' FEL Surface Hole Location

1980' FNL and 330' FWL Bottom Hole Location

Section. 9, T-19S-R31-E

Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 16 miles southeast of Loco Hills, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

From Artesia go east on Highway 82 for approximately 24 miles to Loco Hills. From Loco Hills continue going east Highway 82 for approximately 6 miles to County Road (222) Sugart Road. Turn south on Sugart Road and go approx. 9.9 miles. The new access road will start here going to the east for approximately 150 feet to the southwest corner of the proposed well location.

2. PLANNED ACCESS ROAD.

- A. The proposed new access will go east for approximately 150 feet to the southwest corner of the drilling pad. The road will lie in a west to east direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on one side. Traffic turnouts may be built.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.
- F. An application for an off lease road right of way will be submitted for this access road.

3. LOCATION OF EXISTING WELL

- A. There is drilling activity within a one-mile radius of the wellsite.
- B. An Exhibit shows existing wells within a one-mile radius of the proposed wellsite.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. There are production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on this well location. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

6. SOURCE OF CONSTRUCTION MATERIALS:

Dirt contractor will locate closest pit and obtain any permits and materials needed for construction of the well location.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. This well will be drilled with a closed loop system
- B. The closed loop system will be constructed, maintained, and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division – the “Pit Rule” 19.15.17 NMAC.
- C. Drilling fluids will be removed after drilling and completions are completed.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not approved.

8. ANCILLARY FACILITIES: None

9. WELLSITE LAYOUT:

- A. Exhibit C shows the relative location and dimensions of the well pad, location of the drilling equipment, pulling unit orientation and access road approach. The closed loop system will be constructed, maintained, and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division – the “Pit Rule” 19.15.17 NMAC.
- B. A 600' x 600' area has been staked and flagged.

10. PLANS FOR RESTORATION

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level after they have evaporated and dried.

11. SURFACE OWNERSHIP:

Surface Estate Bureau of Land Management
620 East Greene Street, Carlsbad, NM 88220.

Mineral Estate: Bureau of Land Management
620 East Greene Street, Carlsbad, NM 88220

12. OTHER INFORMATION:

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

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	YATES PETROLEUM CORPORATION
LEASE NO.:	NM105217
WELL NAME & NO.:	CHECKER BIC FEDERAL COM -3H
SURFACE HOLE FOOTAGE:	1980'FNL & 330'FEL
BOTTOM HOLE FOOTAGE:	1980'FNL & 330'FWL
LOCATION:	SECTION 9 T19S-R31E
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**
- ☐ **Special Requirements**
 - Communitization Agreement
- ☐ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - H2S Requirements – Onshore Order #6
 - Special Requirements for Capitan Reef
 - Logging Requirements
 - Waste Material and Fluids
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Communitization Agreement

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. In addition, the well sign shall include the surface and bottom hole lease numbers. If the Communitization Agreement number is known, it shall also be on the sign. If not, it shall be placed on the sign when the sign is replaced.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-6235 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 4 inches in depth. The topsoil will be used for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty (20) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

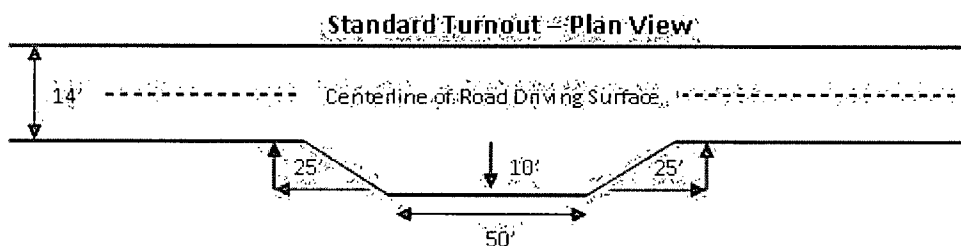
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

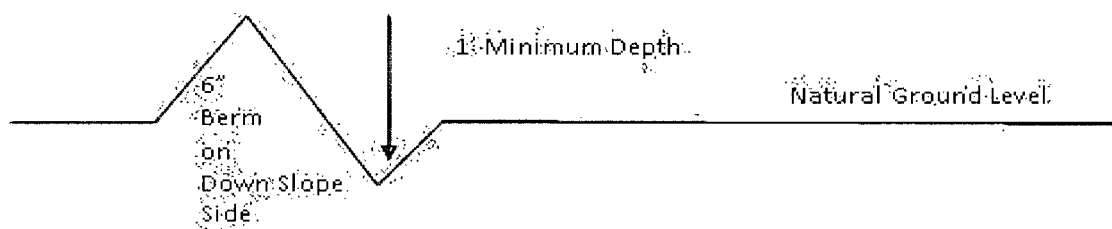


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

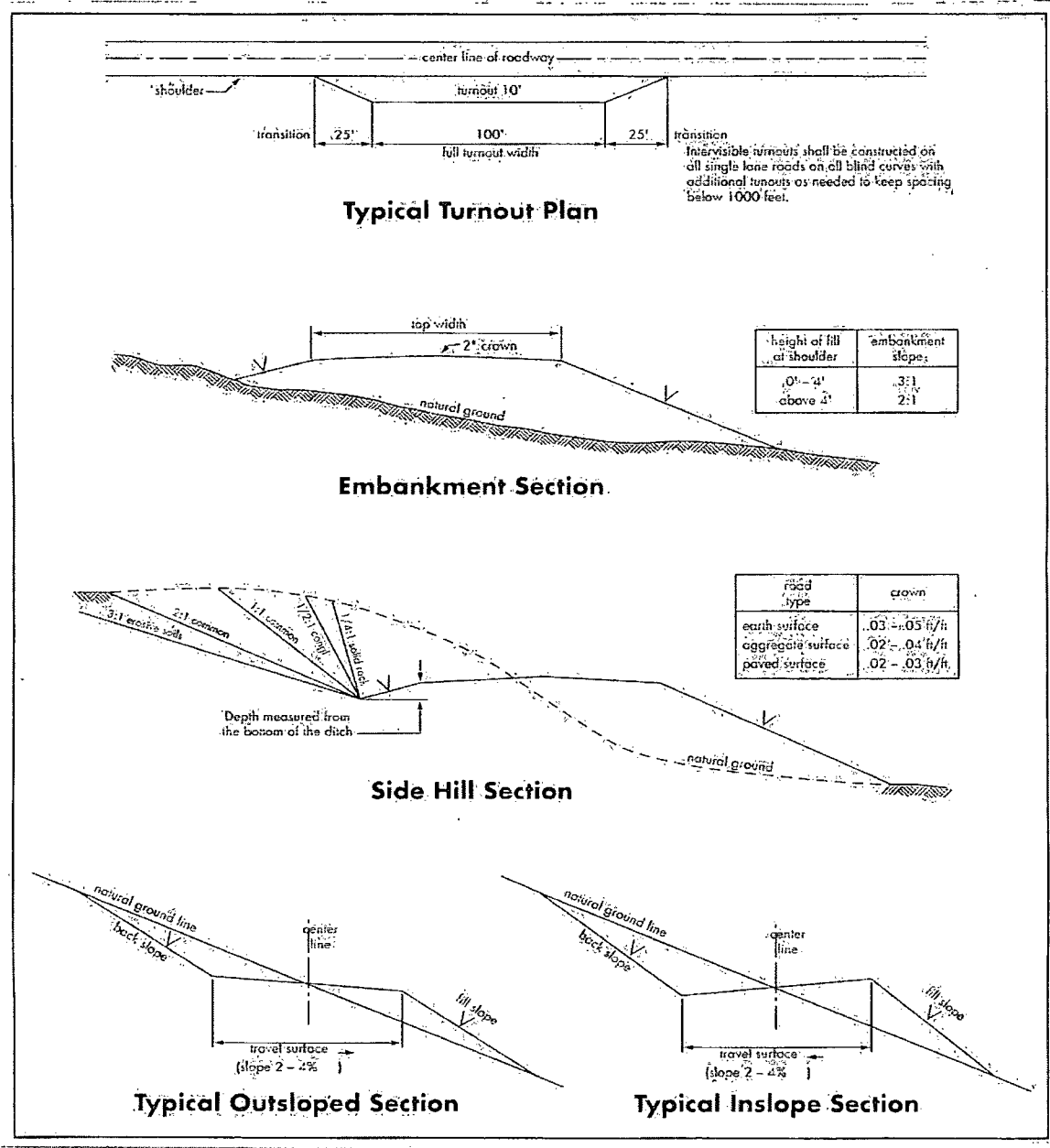
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated **500** feet prior to drilling into the **Yates** formation. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**
2. 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#).

Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

**Possible water and brine flows in the Salado and Artesia groups.
Possible lost circulation in the Artesia group and Capitan Reef.**

1. The 13-3/8 inch surface casing shall be set at **approximately 725 feet (in a competent bed below the Magenta Dolomite, a Member of the Rustler, and if salt is encountered, set casing at least 25 feet above the salt)** and cemented to the surface. **Freshwater mud to be used to setting depth.**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
 - 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 compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Special Capitan Reef requirements:

If any lost circulation occurs below the Base of the Salt, the operator shall do the following:

- **Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.**
 - **Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.**
2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing **which shall be set at approximately 4500' in the base of the Capitan Reef or top of the Delaware Formation, is:**
- ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.
3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
- a. First stage to DV tool:
 - ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
 - b. Second stage above DV tool:
 - ☒ Cement should tie-back at least **1600 feet** (minimum of 50 feet above the reef) into previous casing string. Operator shall provide method of verification.
4. 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.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M) psi. Operator installing a 5M to drill production hole but will test as a 3M.**
 - a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock.
 - d. The results of the test shall be reported to the appropriate BLM office.

- e. 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 appropriate BLM office.**
- f. 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. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

CRW 050813

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation 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 Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES (not applied for in APD)

C. ELECTRIC LINES (not applied for in APD)

IX. 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.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. 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 revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 1, for Loamy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains lovegrass (<i>Eragrostis intermedia</i>)	0.5
Sand dropseed (<i>Sporobolus cryptandrus</i>)	1.0
Sideoats grama (<i>Bouteloua curtipendula</i>)	5.0
Plains bristlegrass (<i>Setaria macrostachya</i>)	2.0

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed