

Split Estate

OCD-ARTESIA

911

ATS-09-453 *RM*

RECEIVED

OCT 20 2009

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD ARTESIA

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of Work ☒ DRILL ☐ REENTER
1b. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone
2. Name of Operator

Yates Petroleum Corporation 025575

3a. Address 105 South Fourth Street, Artesia, NM 88210
3b. Phone No. (include area code) 505-748-1471

4. Location of well (Report location clearly and in accordance with any State requirements *)
At surface 330' FSL & 660' FWL, UL M
At proposed prod. zone 330' FNL & 660' FWL, UL D

14. Distance in miles and direction from the nearest town or post office*
The well is approximately 38 miles southeast of Carlsbad, NM.

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 330
16. No. of acres in lease 960.00
17. Spacing Unit dedicated to this well W2W2 of Section 5, T26S-R30E

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. None
19. Proposed Depth 8750' Pile hole
20. BLM/ BIA Bond No. on file NATIONWIDE BOND #NMB000434
TYD 8230 9900' MD 12,645' RGH 8-17-09

21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3094' GL
22. Approximate date work will start* ASAP
23. Estimated duration

24. Attachments

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

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

25. Signature *Cy Cowan* Name (Printed/ Typed) Cy Cowan Date 8/14/2009
Title Land Regulatory Agent

Approved By (Signature) /s/ Don Peterson Name (Printed/ Typed) Office CARLSBAD FIELD OFFICE
Title FIELD MANAGER Date OCT 16 2009

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

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 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)

Carlsbad Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an
abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NM-102034
2. Name of Operator Yates Petroleum Corporation 025575		6. If Indian, Allottee or Tribe Name N/A
3a. Address 105 South Fourth Street, Artesia, NM 88210	3b. Phone No. (include area code) (505) 748-1471	7. If Unit or CA/Agreement, Name and/or No. N/A
4. Location of Well (Footage, Sec., T, R., M., or Survey Description) 330' FSL & 660' FWL, Surface Hole Location 330' FNL and 660' FWL Bottom Hole Location Section 5, T26S-R30E		8. Well Name and No. Banjo BNO Federal #2H
		9. API Well No.
		10. Field and Pool, or Exploratory Area Undesignated Bone Spring
		11. County or Parish, State Eddy County, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Amend Surface Use
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Plan for production flow line.
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Yates Petroleum Corporation wishes to amend the Surface Use Plan submitted August 14, 2009 to include one (1) 3 1/2 " diameter welded steel tubing surface flowline. The flowline will have a working pressure of 100# psi and a volume of 1000 bpd. This flowline will follow the route of a proposed right-of-way by another company. The entire length of the flowline will be 4626.3' with 2612.6' being on federal surface and 2013.7' is on private surface. A SUA is in place for the private surface.

This flowline will go from the Banjo BNO Federal #2H in the SW/SW/4 of Section 5 to the Banjo BNO Federal #1H in the SE/SE/4 of Section 5, T26S-R30E Eddy County, New Mexico.

Please note attached plats showing the route of this flowline.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Cy Cowan

Title

Land Regulatory Agent

Signature

Date

September 22, 2009

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Is/ Don Peterson

Title

FIELD MANAGER

Date

OCT 16 2009

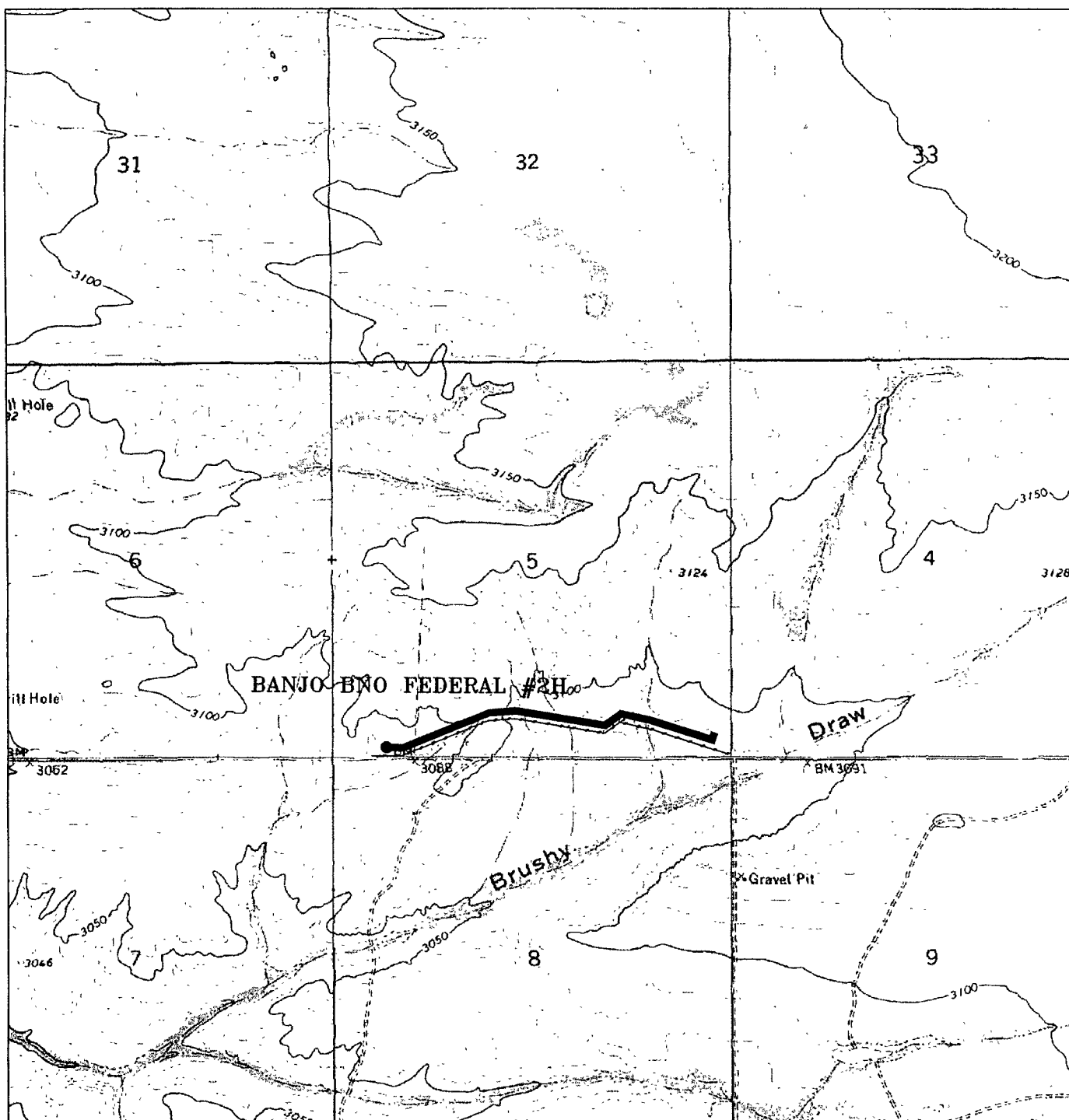
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001, 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.

(Instructions on reverse)



PROPOSED PIPELINE TO THE YATES-BANJO BNO FEDERAL #2H
 Section 5, Township 26 South, Range 30 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: 21693

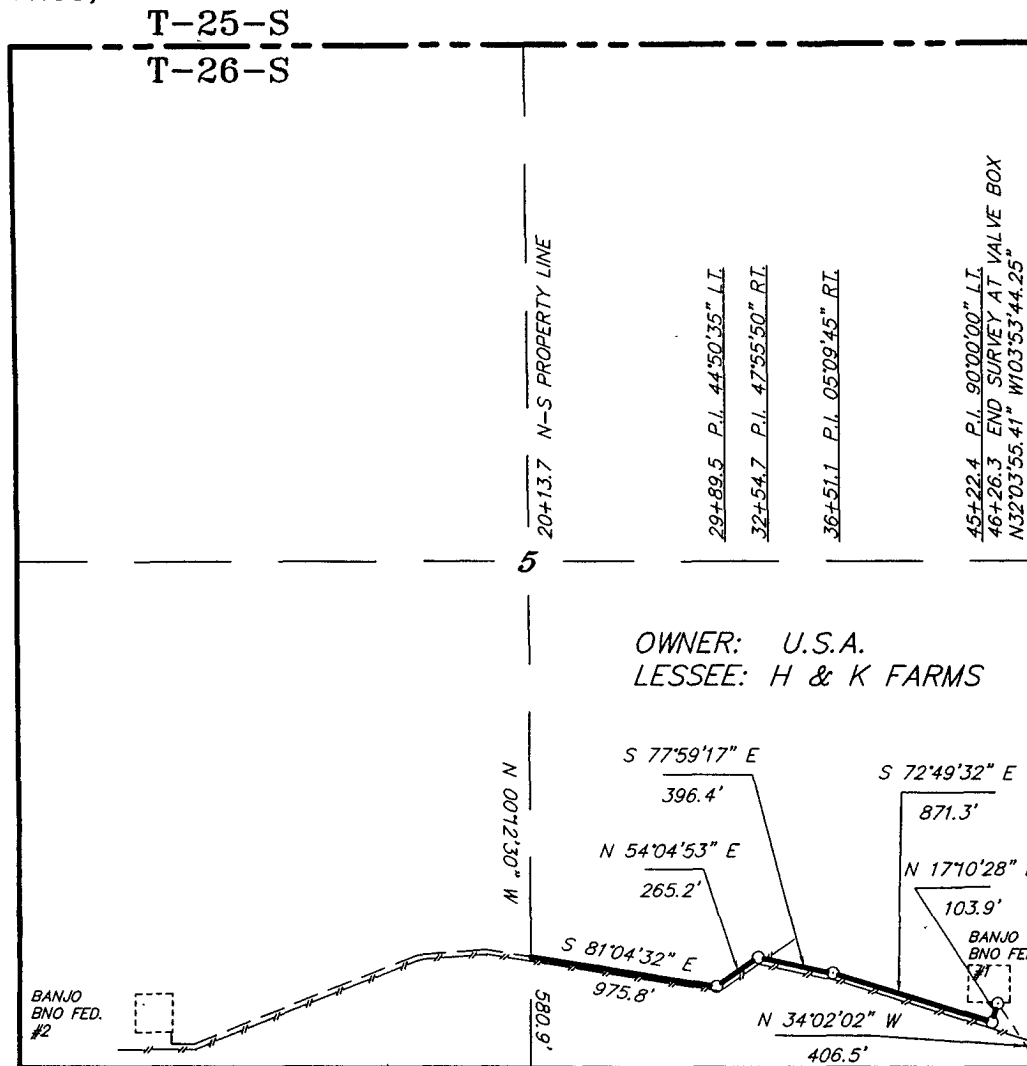
Survey Date: 09/08/09

Scale: 1" = 2000'

Date: 09/10/09

YATES
PETROLEUM
CORP.

SECTION 5, TOWNSHIP 26 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

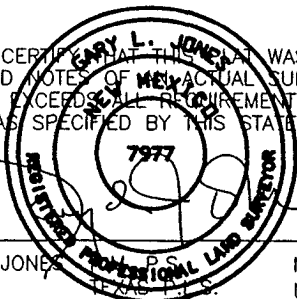


LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 5, TOWNSHIP 26 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

2612.6 FEET = 158.34 RODS = 0.49 MILES = 1.80 ACRES

I HEREBY CERTIFY THAT THIS MAP WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.



GARY L. JONES

No. 7977
No. 5074

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

W.O. Number: 21693

Drawn By: James Presley

Date: 09/09/09

Disk: JLP #1 - YAT21693

1000 0 1000 2000 FEET

YATES PETROLEUM CORP.

REF: PROPOSED PIPELINE TO THE BANJO FED. #1

A PIPELINE CROSSING U.S.A. LAND IN
SECTION 5, TOWNSHIP 26 SOUTH, RANGE 30 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 09/08/09

Sheet 2 of 2 Sheets

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-37363	Pool Code	Pool Name Undesignated Bone Springs
Property Code 37586	Property Name BANJO "BNO" FEDERAL	Well Number 2H
OGRID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3094'

Surface Location

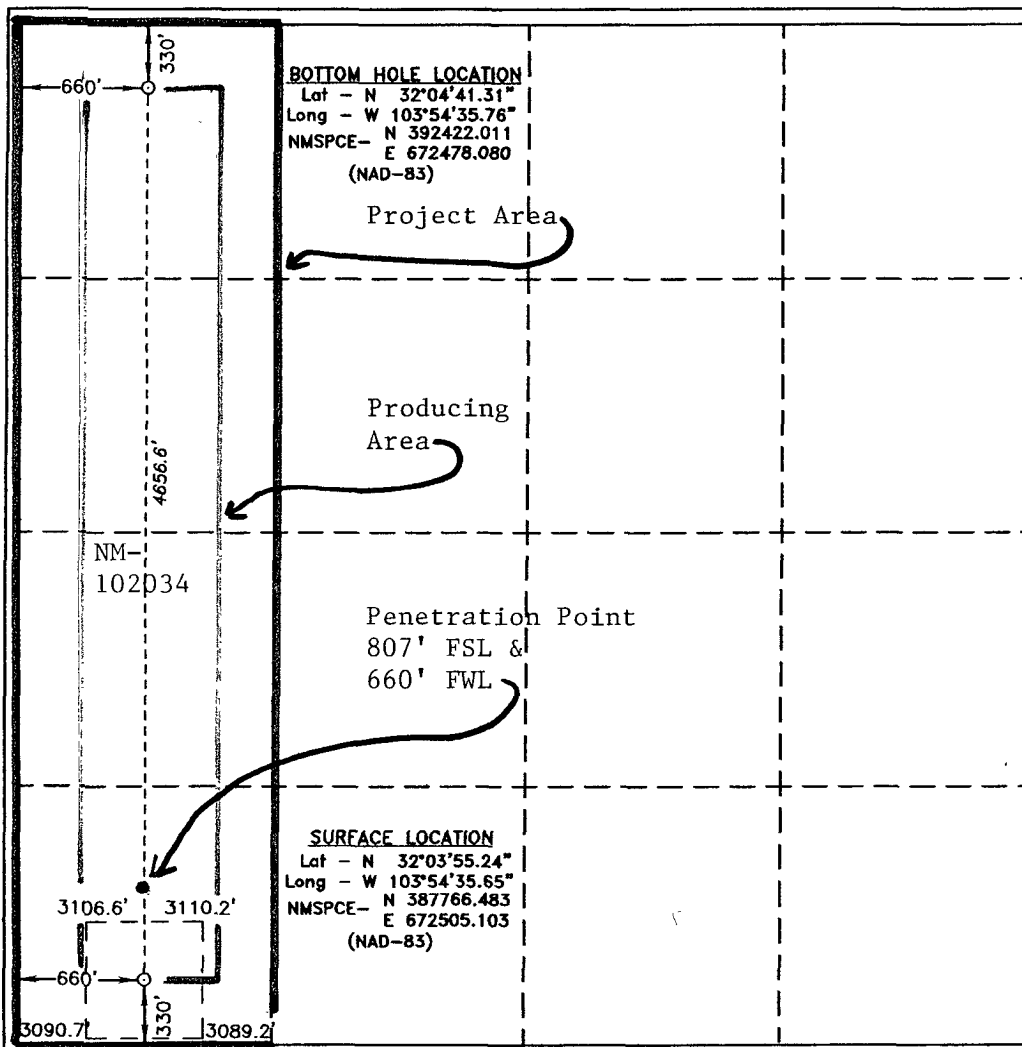
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	5	26 S	30 E		330	SOUTH	660	WEST	EDDY

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
D	5	26 S	30 E		330	NORTH	660	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160 W2W2			

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.

Cy Cowan 8/13/09
Signature Date

Cy Cowan

Printed Name

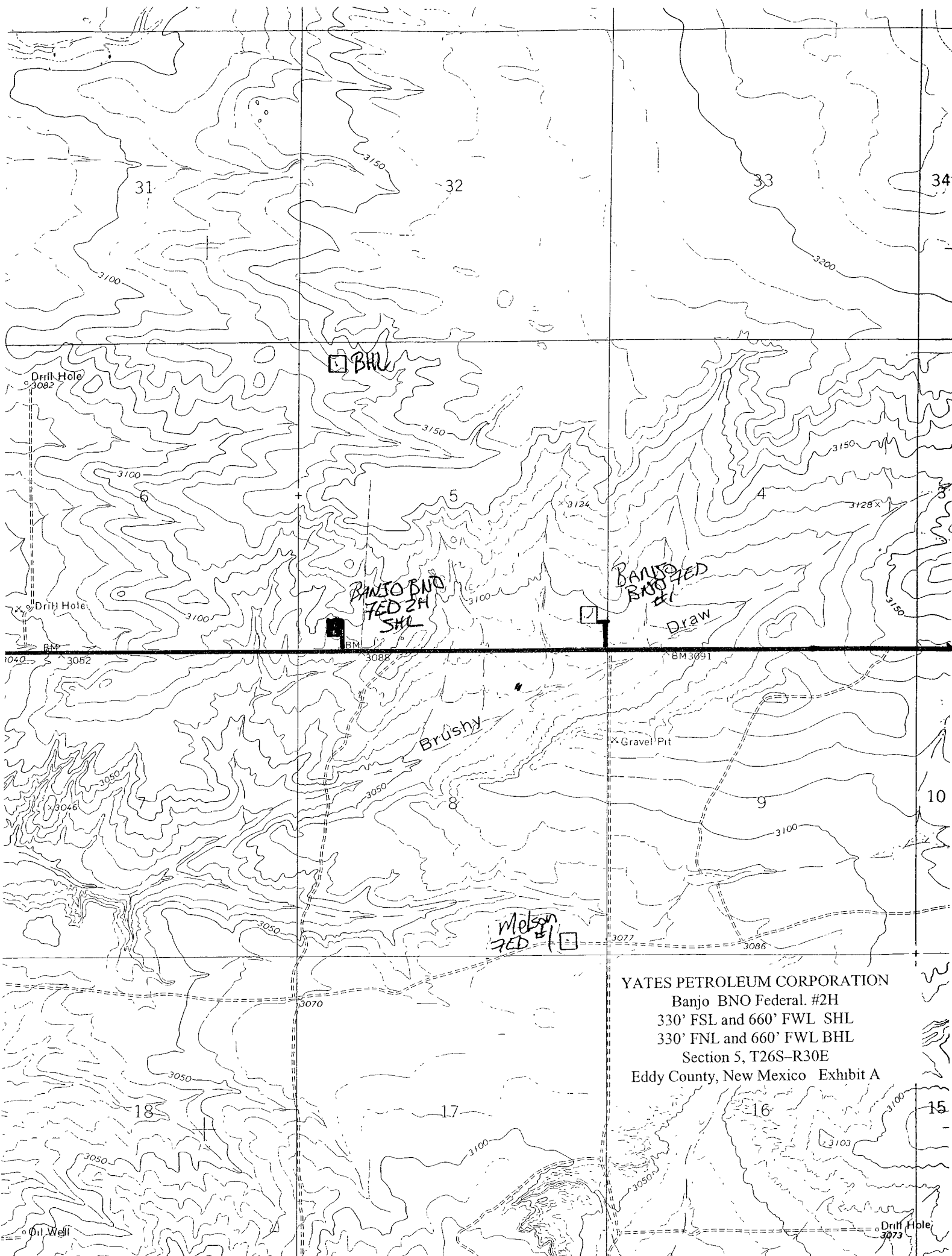
SURVEYOR CERTIFICATION

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

Date Surveyed
Signature & Seal of
Professional Surveyor

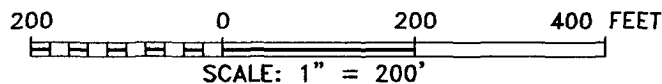
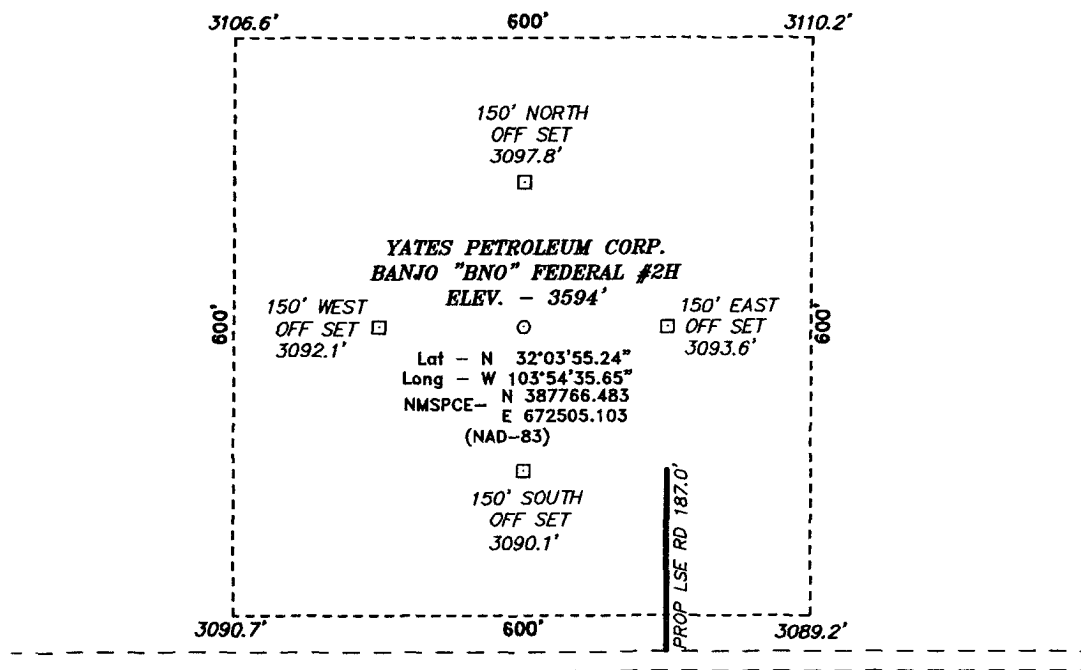
Certificate No. Gary L. Jones 7977

BASIN SURVEYS



YATES PETROLEUM CORPORATION
Banjo BNO Federal. #2H
330' FSL and 660' FWL SHL
330' FNL and 660' FWL BHL
Section 5, T26S-R30E
Eddy County, New Mexico Exhibit A

SECTION 5, TOWNSHIP 26 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



YATES PETROLEUM CORP.

REF: BANJO "BNO" FEDERAL #2H / WELL PAD TOPO

THE BANJO "BNO" FEDERAL #2H LOCATED 330'
FROM THE SOUTH LINE AND 660' FROM THE WEST LINE OF
SECTION 5, TOWNSHIP 26 SOUTH, RANGE 30 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

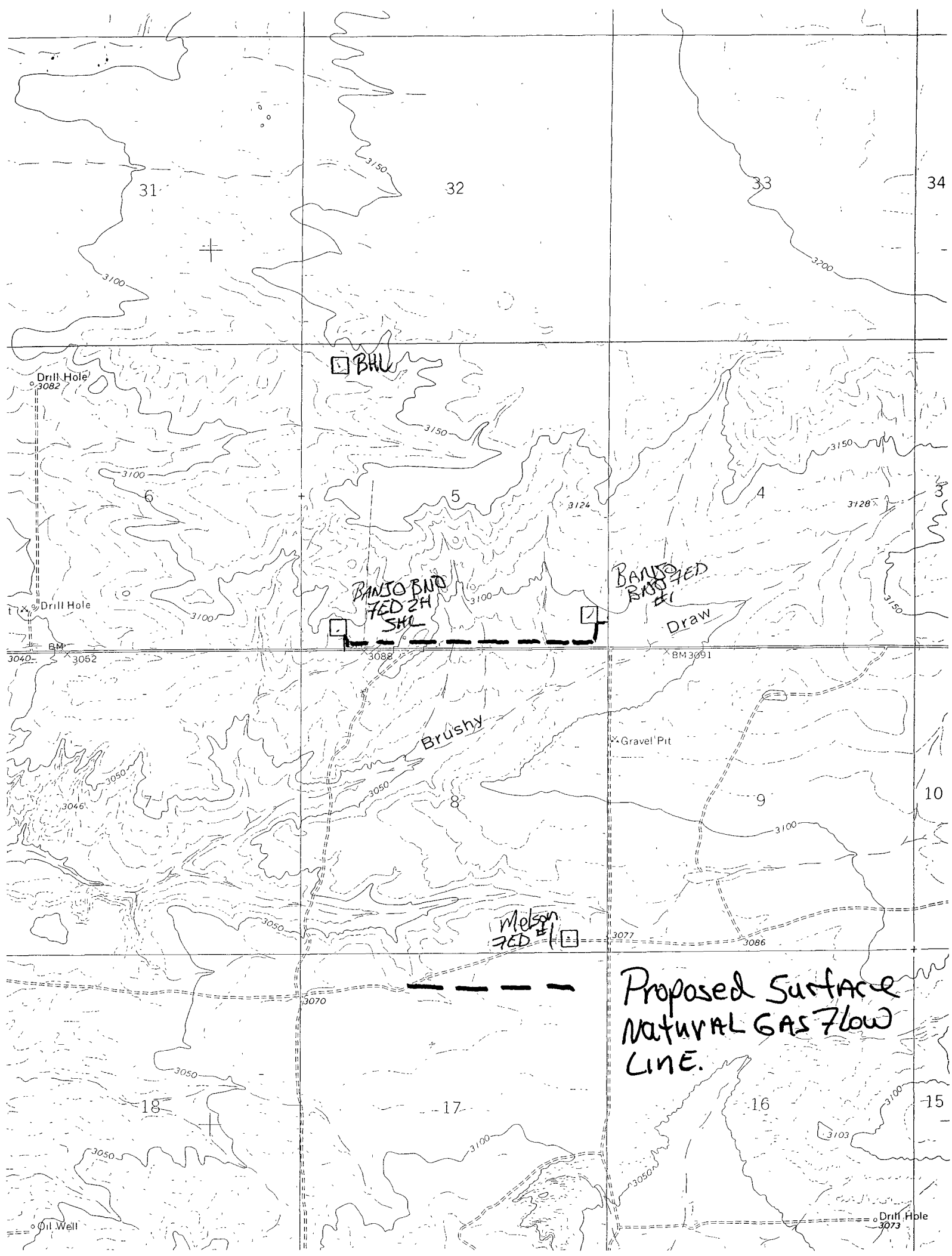
BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

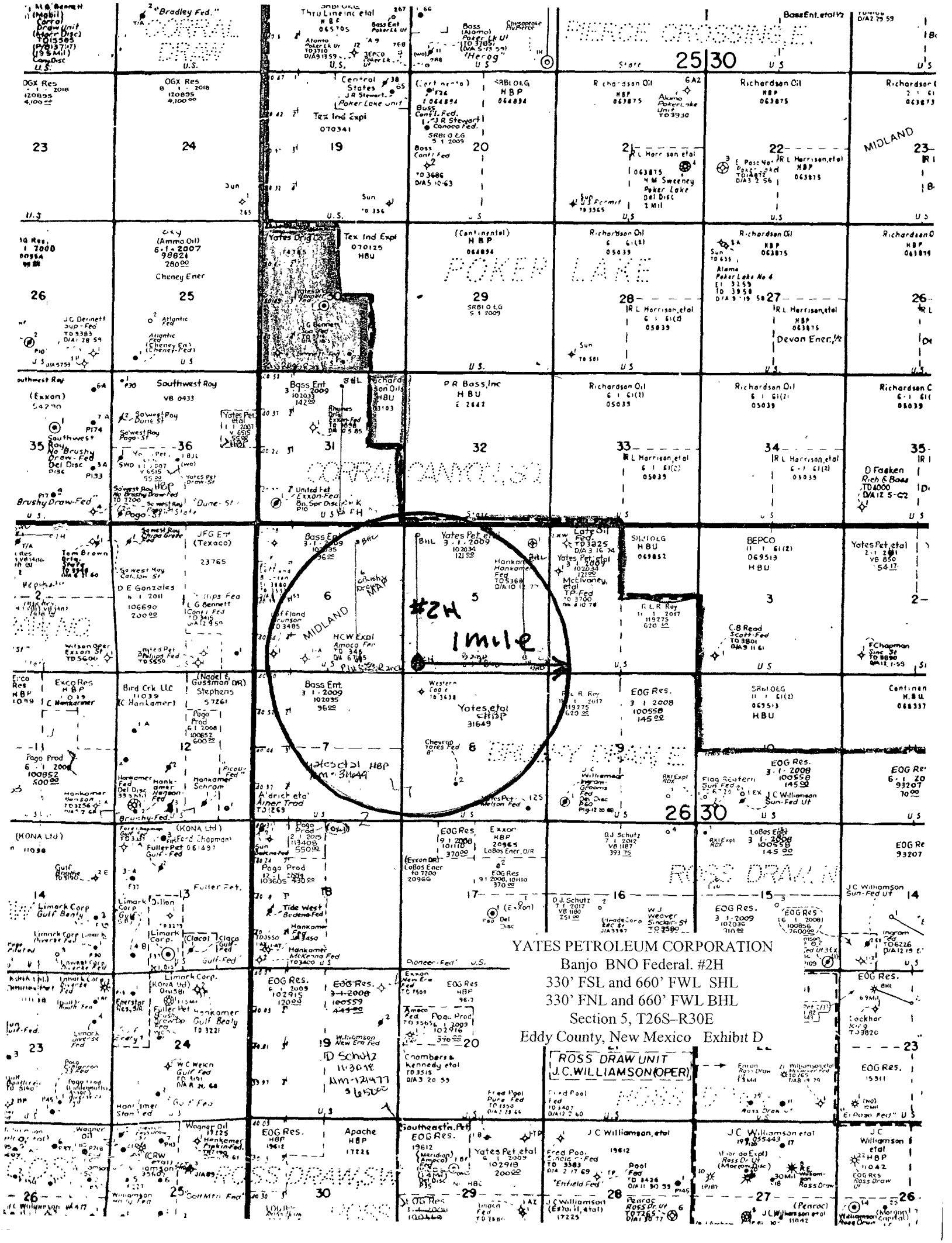
W.O. Number: 21457 Drawn By: J. SMALL

Date: 06-17-2009 Disk: JMS 21457

Survey Date: 06-16-2009

Sheet 1 of 1 Sheets





YATES PETROLEUM CORPORATION
Banjo BNO Federal #2H
330' FSL and 660' FWL, Surface Hole Location
330' FNL & 660' FWL, Bottom Hole Location
Section 5, T26S-R30E
Eddy County, New Mexico

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

Rustler	880'	Brushy Canyon	5650'-oil
Top of Salt	940'	Bone Springs	7360'-oil
Base of Salt	2940'	Bone Springs 1 /SD/	8300'-oil
Bell Canyon	3590'	TVD	8750'-Pilot
Cherry Canyon	4350'-oil	TMD	12645'-MD

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

Water: 170'
Oil or Gas: Oil Zones: 4350', 5650', 7360' & 8300'.

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and on the 9 5/8" casing and rated for 3000# BOP System. Pressure tests will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.
4. 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.
5. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: All new casing to be used

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8"	48#	H-40	ST&C	0-920'	920'
12 1/2"	9 5/8"	40#	J-55	ST&C	0-100'	100'
12 1/2"	9 5/8"	36#	J-55	ST&C	100-3300'	3200'
12 1/2"	9 5/8"	40#	HCK-55	ST&C	3300-3600'	300'
8 3/4"	5.5"	17#	HCP- 110	LT&C	0'- 12845' 12,645'	12645'

1. Minimum Casing Design Factors: Burst 1.0, Tensile Strength 1.8, Collapse 1.125
2. Pilot hole drilled vertically to 8750'. Well will be plugged back with 180' plug on bottom and 400'-500' kick off plug. Kick off at approx. 7753' and directionally drill 12 degrees per 100'. If hole conditions dictate, 7" casing will be set. A 6 1/8" hole will then be drilled to 12,645' MD (8230' TVD) where 4 1/2" casing will beset and cemented. If 7" is not set, then 8 3/4" hole drilled to 12,645' MD (6230' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 807' FSL & 660' FWL of Section 5, T26S-R30E. Deepest TVD in the well is 8750' in the pilot hole. Deepest TVD in the lateral is 8230'

Contingency Casing Design

If hole conditions dictate, 7" casing will be set at 8,500' MD (8,230' TVD). A 6 1/8" hole will then be drilled to 12,645' MD (8,230' TVD) where 4 1/2" casing will be set and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 7700'.

2nd Intermediate

0 ft to 200 ft				Make up Torque ft-lbs			Total ft =
O.D.	Weight	Grade	Threads	opt.	min.	mx.	
7 inches	26 #/ft	J-55	LT&C	3670	2750	4590	
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift	
4,320 psi	4,980 psi	367,000 #		415,000 #		6.151	

200 ft to 5,600 ft				Make up Torque ft-lbs			Total ft =
O.D.	Weight	Grade	Threads	opt.	min.	mx.	
7 inches	23 #/ft	J-55	LT&C	3130	2350	3910	
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift	
3,270	4,360 psi	313,000 #		366,000 #		6.25	

5,600 ft to 7,800 ft				Make up Torque ft-lbs			Total ft =
O.D.	Weight	Grade	Threads	opt.	min.	mx.	
7 inches	26 #/ft	J-55	LT&C	3670	2750	4590	
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift	
4,320 psi	4,980 psi	367,000 #		415,000 #		6.151	

7,800 ft to 8,500 ft				Make up Torque ft-lbs			Total ft =
O.D.	Weight	Grade	Threads	opt.	min.	mx.	
7 inches	26 #/ft	L-80	LT&C	5110	3830	6390	
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift	
5,410 psi	7,240 psi	511,000 #		604,000 #		6.151	

DV tools placed at 7700' & 4700'

Stage I: Cemented w/175sx PVL (YLD 1 41 Wt 13) TOC= 7700'

Stage II: Cemented w/640sx PVL (YLD 1 41 Wt 13) TOC= 4700'

Stage III: Cemented w/125sx Lite Crete (YLD 2 78 Wt 9 9), tail w/100sx PVL (YLD 1 41 Wt 13) TOC= 3100'

Production

0 ft to 12,645 ft				Make up Torque ft-lbs			Total ft =
O.D.	Weight	Grade	Threads	opt.	min.	mx.	
4.5 inches	11.6 #/ft	HCP-110	LT&C	3020	2270	3780	
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift	
8,650 psi	10,690 psi	279,000 #		367,000 #		3.875	

DV tool placed at approx 7700' and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 7700'.

Cemented w/675sx PVL (YLD 1 41 Wt 13) TOC= 7700'

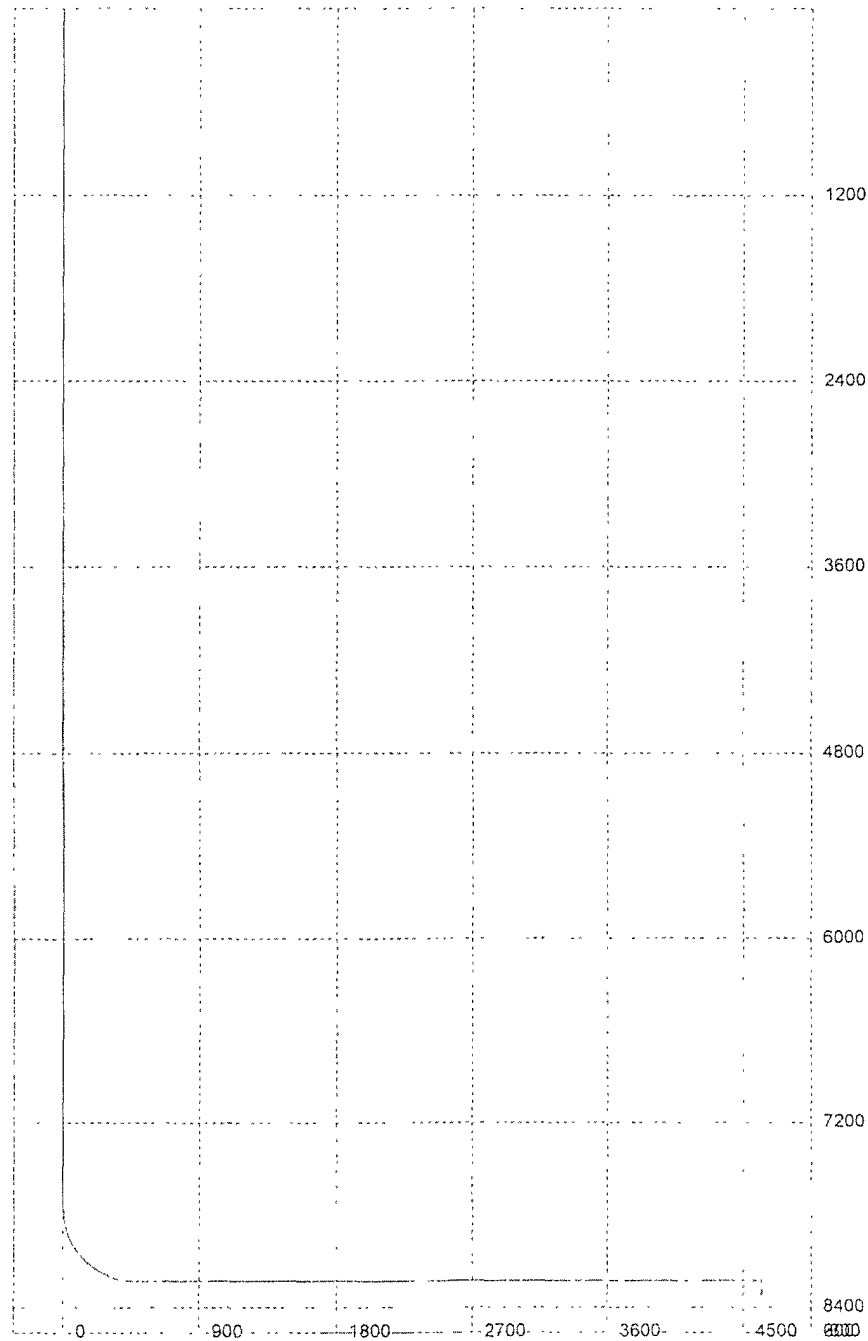
M.D.	Inclination	Azimuth	T.V.D.	N+/S-	E+/W-	D.L.S.	ToolFace	T.F. Ref (HS/GN)	
0	0	0	0	0	0	0			
880	0	0	880	0	0	0			RUSTLER
940	0	0	940	0	0	0			TOP OF SALT
2,940	0	0	2,940	0	0	0			BASE OF SALT
3,590	0	0	3,590	0	0	0			BELL CANYON
4,350	0	0	4,350	0	0	0			CHERRY CANYON
5,650	0	0	5,650	0	0	0			BRUSHY CANYON
7,360	0	0	7,360	0	0	0			BONE SPRINGS
7753	0	0	7753	0	0	12	0	GN	KOP.
7775	2.64	0	7774.99	0.51	0	12	0	HS	
7800	5.64	0	7799.92	2.31	0	12	0	HS	
7825	8.64	0	7824.73	5.42	0	12	0	HS	
7850	11.64	0	7849.33	9.82	0	12	0	HS	
7875	14.64	0	7873.68	15.5	0	12	0	HS	
7900	17.64	0	7897.69	22.45	0	12	0	HS	
7925	20.64	0	7921.3	30.65	0	12	0	HS	
7950	23.64	0	7944.46	40.07	0	12	0	HS	
7975	26.64	0	7967.09	50.69	0	12	0	HS	
8000	29.64	0	7989.13	62.48	0	12	0	HS	
8025	32.64	0	8010.53	75.4	0	12	0	HS	
8050	35.64	0	8031.21	89.43	0	12	0	HS	
8075	38.64	0	8051.14	104.52	0	12	0	HS	
8100	41.64	0	8070.25	120.64	0	12	0	HS	
8125	44.64	0	8088.49	137.73	0	12	0	HS	
8150	47.64	0	8105.81	155.75	0	12	0	HS	
8175	50.64	0	8122.17	174.66	0	12	0	HS	
8200	53.64	0	8137.51	194.39	0	12	0	HS	
8225	56.64	0	8151.79	214.91	0	12	0	HS	
8250	59.64	0	8164.99	236.14	0	12	0	HS	
8275	62.64	0	8177.06	258.03	0	12	0	HS	
8300	65.64	0	8187.96	280.52	0	12	0	HS	
8325	68.64	0	8197.67	303.56	0	12	0	HS	
8350	71.64	0	8206.16	327.07	0	12	0	HS	
8375	74.64	0	8213.41	350.99	0	12	0	HS	
8400	77.64	0	8219.4	375.26	0	12	0	HS	
8425	80.64	0	8224.11	399.81	0	12	0	HS	
8450	83.64	0	8227.53	424.57	0	12	0	HS	
8475	86.64	0	8229.65	449.48	0	12	0	HS	
8500	89.64	0	8230.46	474.46	0	12	0	HS	
8503.06	90.01	0	8230.47	477.52	0	12	0	HS	BONE SPRINGS/PAY
12645.54	90.01	0	8230	4620	0	0	0		LATERAL TD

Pilot hole drilled vertically to 8750'. Well will be plugged back with 180' plug on bottom and 400'-500' kick off plug. Kick off at approx 7753' and directionally drill 12 degrees/100'. If hole conditions dictate, 7" casing will be set. A 6 1/8" hole will then be drilled to 12,645' MD (8,230' TVD) where 4 1/2" casing will be set and cemented. If 7" is not set, then 8 3/4" hole will be drilled to 12,645' MD (8,230' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 807' FSL and 660' FWL, 5-26S-30E. Deepest TVD in the well is 8750' in the pilot hole. Deepest TVD in the lateral is 8230'.

3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation

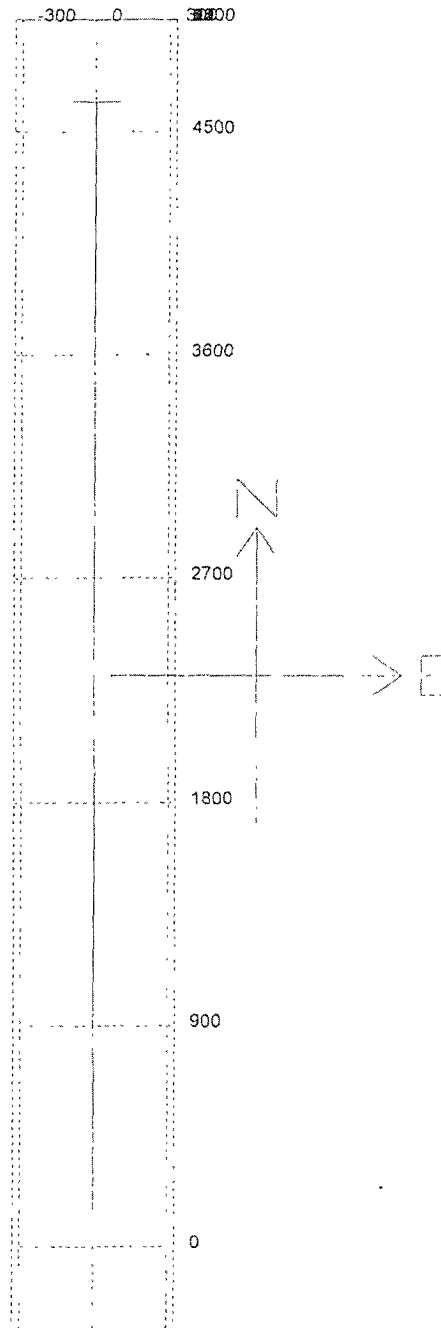
Well: Banjo BNO Federal #2H



3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation

Well: Banjo BNO Federal #2H



B. CEMENTING PROGRAM: *See COA*

Surface Casing: Lead with 500 sacks 'C' Lite + 2%CaCL₂ (Wt. 12.90 Yld 1.97). Tail in 225 sacks 'C' + 2%CaCL₂ (WT 14.80 YLD 1.34). TOC surface.

Intermediate Casing: 960 sacks of C50-50 Poz (WT 12.60 YLD 1.96) Tail in with 200 sacks 'C' + 2%CaCL₂ (WT 14.80 YLD 1.34). TOC surface

Production Casing:

Stage One: 1775 sacks PecosVilt (WT 13.00 YLD 1.41). TOC. 7700'. DV Tool at 7700'

Stage Two: Lead with 1075 sacks PecosVilt (WT 13.00 YLD 1.41). TOC 4700' DV Tool at 4700'.

Stage Three: Lead in with 200 sacks Lite Crete (WT 9.90 YLD 2.66). Tail in with 100 sacks PecosVilt (WT 13.00 YLD 1.41). TOC 3100'.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-920'	Fresh Water	8.6-9.2	29-32	N/C
920'-3600'	Brine Water	10.0-10.2	28-28	N/C
3600'-8750'	Cut Brine	8.9-9.5	28-31	N/C
7753'-12465'	Cut Brine (Lateral Section)	8.9-9.3	28-28	<15cc

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

7. EVALUATION PROGRAM: *See COA*

Samples: 30' samples to 3000'. And 10' samples 3000' to TD

Logging: Platform Hals, CMR, SWC or Gas Analysis from bulk cutting samples 7500'-8300'

Coring: None anticipated

DST's: None Anticipated

Mudlogging: Yes: From out of surface casing.

8. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Maximum Anticipated BHP:

0'-920' 440 PSI

920'-3600' 1910 PSI

3600'-8750' 4320 PSI

Abnormal Pressures Anticipated: None

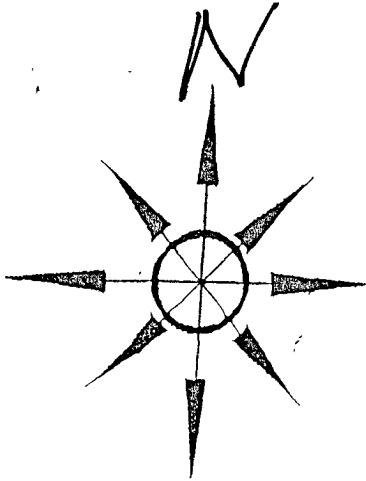
Lost Circulation Zones Anticipated: None.

H₂S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 150 F

9. 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 20 days.



Yates Petroleum Corporation

Location Layout for Permian Basin

YATES PETROLEUM CORPORATION

Banjo BNO Federal. #2H

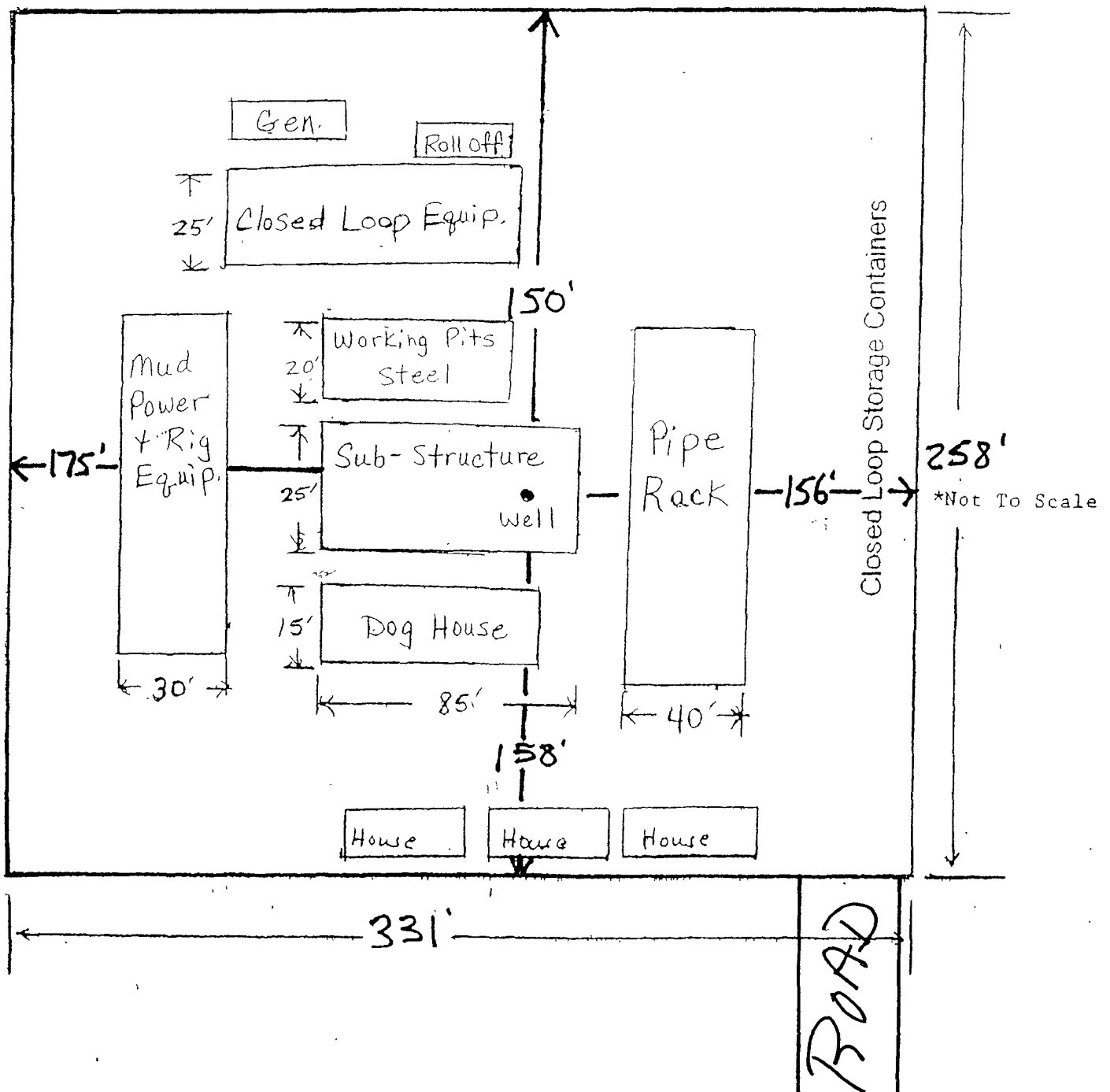
330' FSL and 660' FWL SHL

330' FNL and 660' FWL BHL

Section 5, T26S-R30E

Eddy County, New Mexico Exhibit B

Closed Loop Design Plan

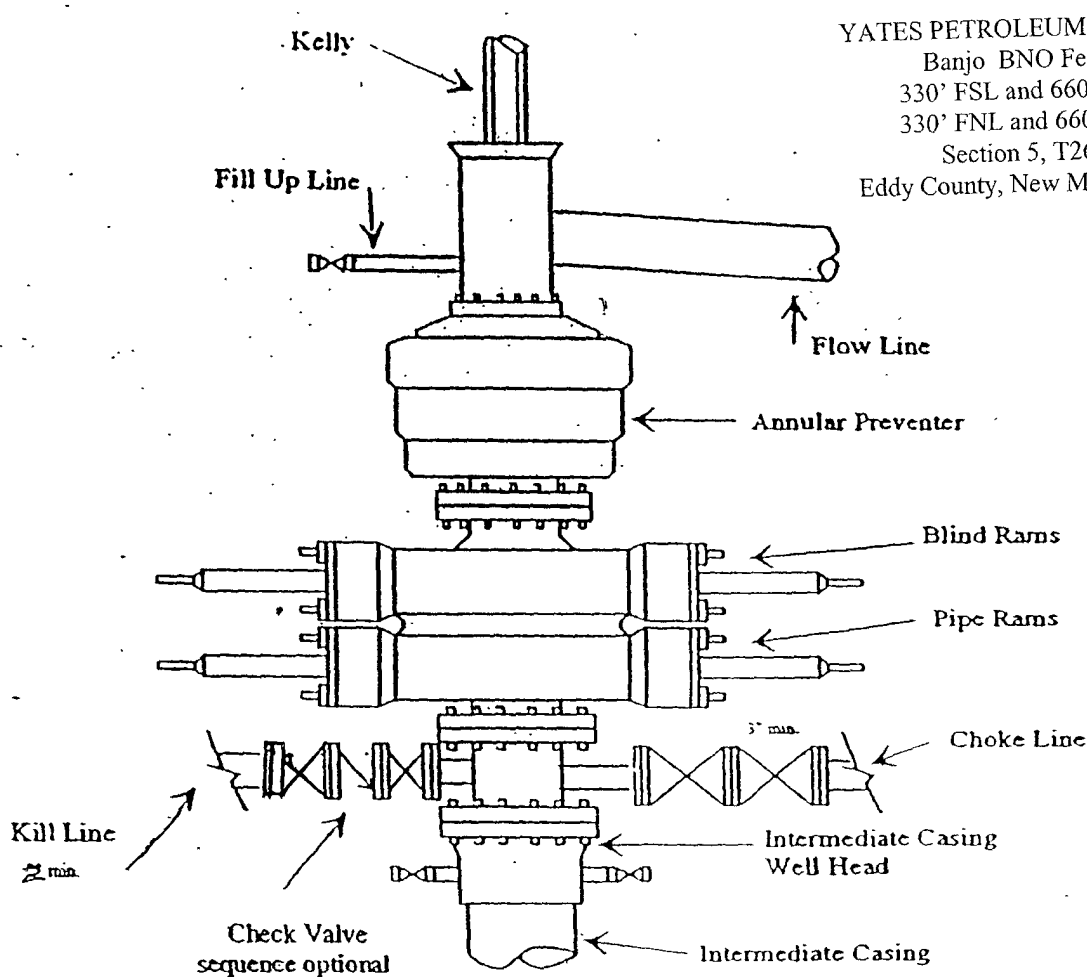




Yates Petroleum Corporation

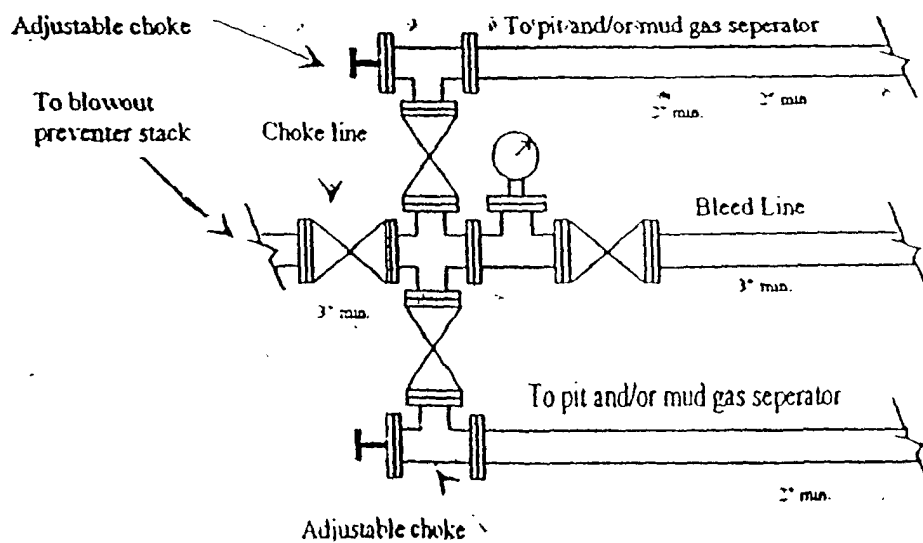
BOP-3

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



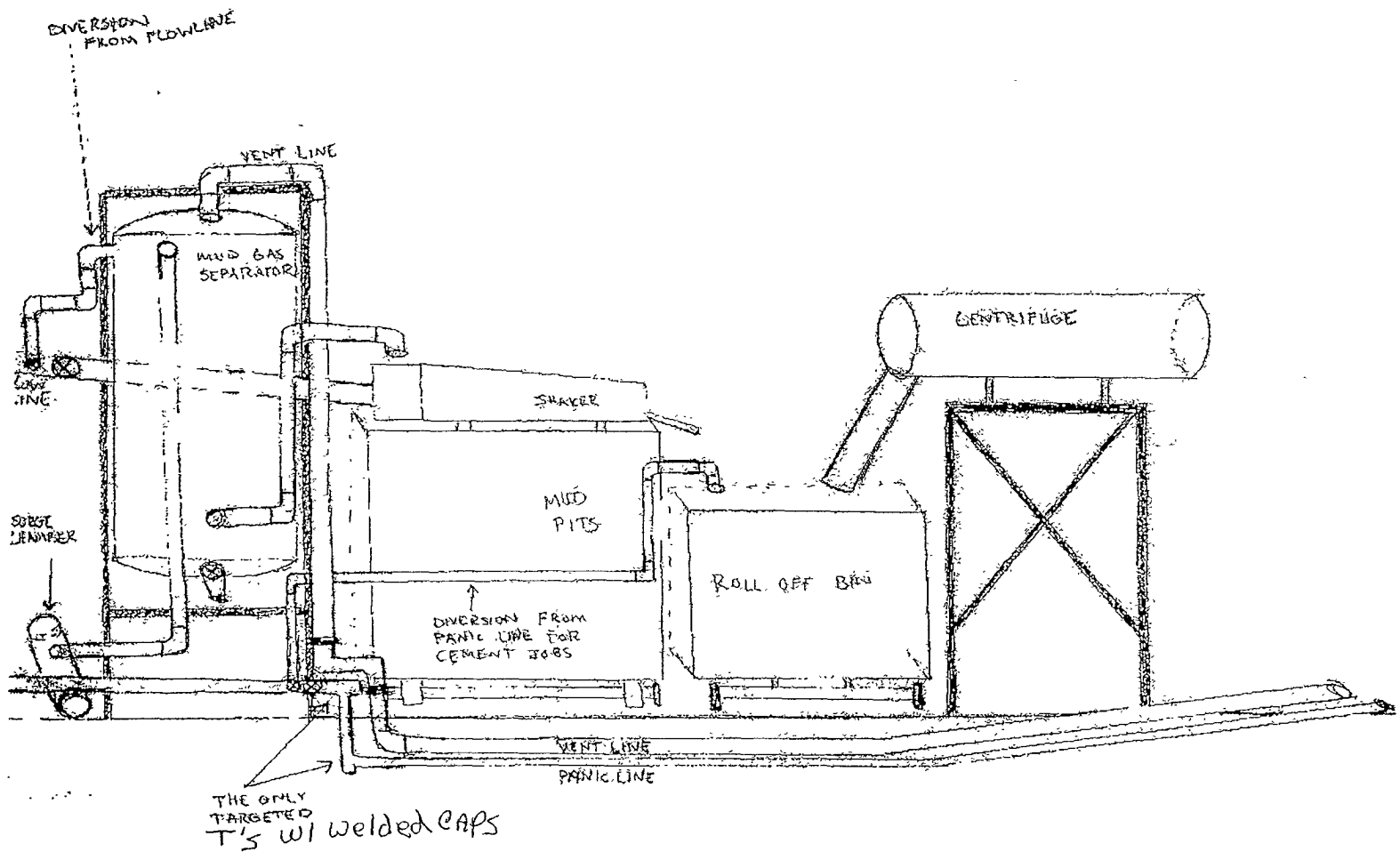
YATES PETROLEUM CORPORATION
Banjo BNO Federal #2H
330' FSL and 660' FWL SHL
330' FNL and 660' FWL BHL
Section 5, T26S-R30E
Eddy County, New Mexico Exhibit C

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



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

YATES PETROLEUM CORPORATION
Banjo BNO Federal. #2H
330' FSL and 660' FWL SHL
330' FNL and 660' FWL BHL
Section 5, T26S-R30E
Eddy County, New Mexico Exhibit E



MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Banjo BNO Federal #2H
330' FSL & 660' FWL, Surface Hole Location
330' FNL & 660' FWL, Bottom Hole Location
Section 5, T26S-R30E
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 well site is located approximately 38 miles east of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS: Go south out of Carlsbad, New Mexico on the Pecos Highway (285) for approximately 28.5 miles to Whitehorn Road (CR-725). Turn left on Whitehorn and go 3.9 miles. At this point there will be a sign that says "CRW SWD". Turn left here off of CR-725 on a pipeline road going east. Go east on this road for approximately 4.9 miles. At this point there will be an oilfield building on the left. Just before the building the new road will start here going to the left for approx. 200' to the southeast corner of the proposed well location.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 200' in length from the point of origin to the southeast corner of the drilling pad.
- 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 both sides. No traffic turnout may be needed.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL:

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

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 the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power until an electric line can be built, if needed.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with a brine 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:

The dirt contractor will be responsible for finding a source of material for construction of road and pad and will obtain any permits that may be required.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. A closed loop system will be used to drill this well.
- 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. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. 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:

One (1) ~~3/4~~ L-80 surface steel natural gas flowline having a working pressure of 100 psi and a volume of ~~2000 mcf per day~~ ^{1000 bpd}. The flowline will go from the southeast corner of the Banjo BNO Federal #2H to southeast corner on the Banjo BNO Federal #1H. The pipeline will be approximately 4200' and will follow existing pipeline and road right-of-ways. No archaeological report will be submitted as the BLM has this information on file. Please note attached plat.

9. WELLSITE LAYOUT:

- A. Exhibit B shows the relative location and dimensions of the well pad, the closed loop mud system, location of the drilling equipment, rig orientation and access road approach. The proposed well location will be approximately 350' x 300'. All of the location will be constructed within the 600' x. 600' staked area.
- 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. 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 well site in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and have been leveled.
- C. If the proposed well is plugged and abandoned, 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, if any, will be filled level after they have evaporated and dried. Pit reclamation will meet 19.15.17 requirements.

Banjo

Bingo BNO Federal #2H
Page Three

11. SURFACE OWNERSHIP:

Private Surface owned by El Paso Natural Gas Company, El Paso Texas. Yates Petroleum Corporation is in the process of obtaining a surface use agreement with the surface owner at this time.

Federal Minerals under the management of the Bureau of Land Management, 620 East Greene Street, Carlsbad, NM 88220.

12. OTHER INFORMATION:

A. The primary use of the surface is for grazing.

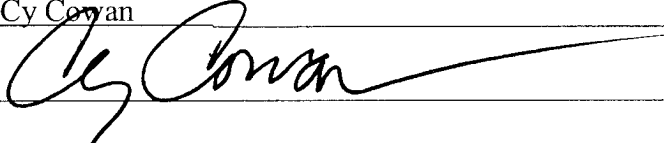
B. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, and historical and cultural sites.

CERTIFICATION
YATES PETROLEUM CORPORATION
Banjo BNO Federal #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 13th day of August, 2009.

Printed Name Cy Cowan

Signature 

Position Title Land Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372

E-mail (optional) cy@yatespetroleum.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) _____

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corp
LEASE NO.:	NM 102034
WELL NAME & NO.:	2H Banjo BNO Federal
SURFACE HOLE FOOTAGE:	330' FSL & 660' FWL
BOTTOM HOLE FOOTAGE:	330' FNL & 660' FWL
LOCATION:	Section 5, T. 26 S., R 30 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

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

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Fence Requirement
 - Heronries corridor
- ☒ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - Logging Requirements
- ☒ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Right-of-way width
 - Flow line route
- ☒ **Interim Reclamation/Reseeding Procedures**
- ☐ **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)

Fence Requirement

Entry across a fence line shall be avoided if possible.

Where entry is required to install the flow line across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Heronries corridor

Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

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) 234-5972 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 of the well pad. The topsoil shall not be used to backfill the reserve pit and 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

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. 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 thirty (30) 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

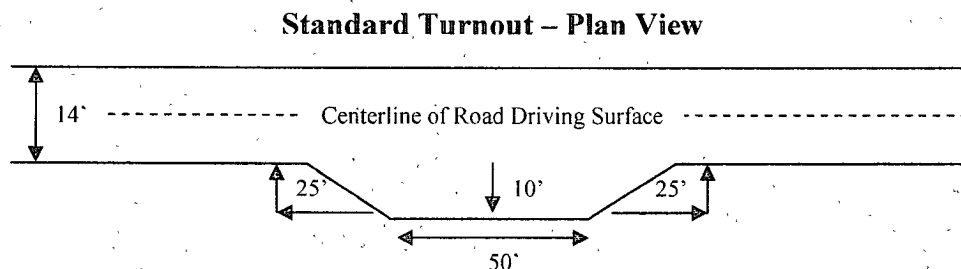
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

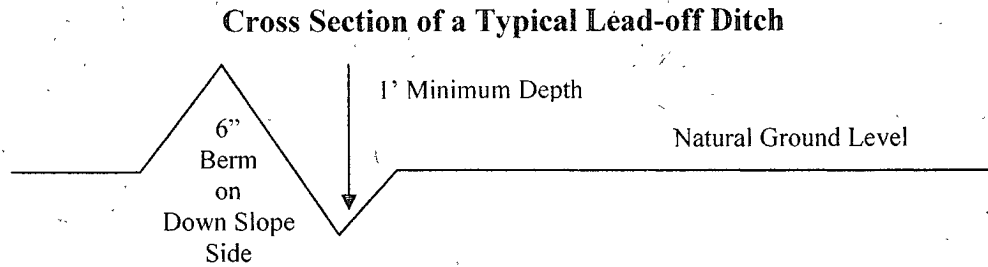
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing and inslaping, 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.



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

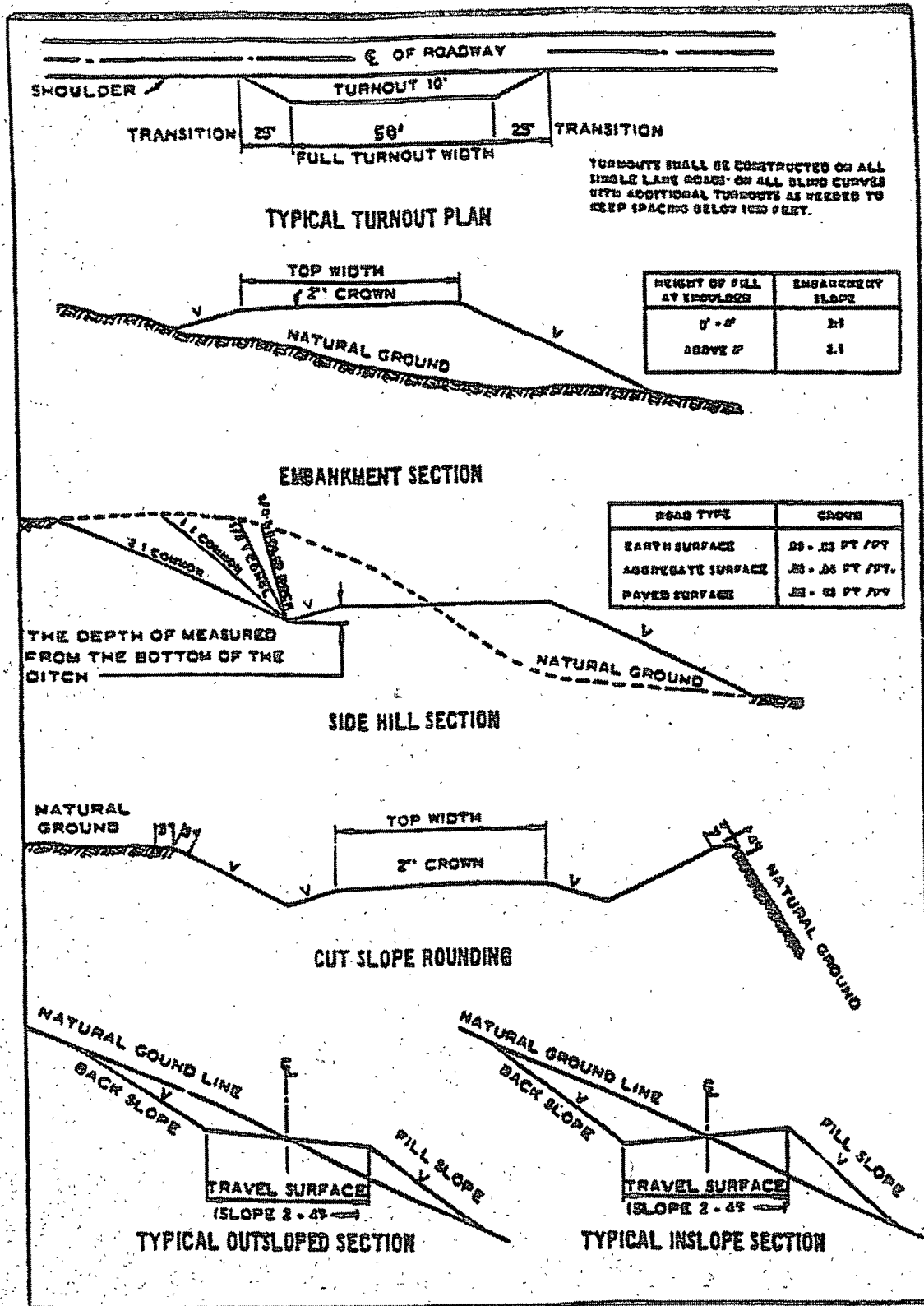
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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 a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

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

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts 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.
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 CAL/GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. 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 and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

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

Wait on cement (WOC) time 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. 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.

Medium Cave/Karst

Possible lost circulation in the Delaware and Bone Springs Formations.

1. The 13-3/8 inch surface casing shall be set **at approximately 920 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. . **If the Salado is penetrated, the operator should set surface casing approximately 25 feet above the Salado Formation.**
 - 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 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 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.
2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing (**set in the Lamar limestone**) is:

☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.

If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

3. The minimum required fill of cement behind the 5-1/2 inch production casing is:

a. First stage to DV tool, cement shall:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job.

b. Second stage above DV tool, cement shall:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with third stage cement job.

c. Third stage above DV tool, cement shall:

☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

Contingency casing program:

4. The minimum required fill of cement behind the 7 inch intermediate casing is:

a. First stage to DV tool, cement shall:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job.

b. Second stage above DV tool, cement shall:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with third stage cement job.

d. Third stage above DV tool, cement shall:

☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

5. The minimum required fill of cement behind the 4-1/2 inch production casing is:

☒ Cement to come to DV tool depth. Operator shall provide method of verification.

6. 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

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. **Piping from choke manifold and to flare to be as straight as possible.**

1. 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**.
2. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. 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.**
 - d. 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. DRILL STEM TEST

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

CRW 091009

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

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the APD, Sundry Notices and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
- b. Activities of other parties including, but not limited to:
 - (1) Land clearing.
 - (2) Earth-disturbing and earth-moving work.
 - (3) Blasting.
 - (4) Vandalism and sabotage.
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder

of any responsibility as provided herein.

6. The authorized right-of-way width will be 25 feet. 14 feet of the right-of-way width will consist of existing disturbance (existing roads) and the remaining 11 feet will consist of area adjacent to the disturbance. All construction and maintenance activity will be confined to the existing roads. The surface pipeline will lie on the south side of the existing road that travels in an east/west direction.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder 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 will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

IX. INTERIM RECLAMATION & RESEEDING PROCEDURES

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.

Operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions 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 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.

B. RESEEDING PROCEDURES

Once the well is drilled, all completion procedures accomplished and all trash removed, reseed the location and all surrounding disturbed areas as follows:

Seed Mixture 3, for Shallow 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 of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/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 Bristlegrass (<i>Setaria magrostachya</i>)	1.0
Green Spangletop (<i>Leptochloa dubia</i>)	2.0
Side oats Grama (<i>Bouteloua curtipendula</i>)	5.0

*Pounds of pure live seed:

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

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

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 agreement.