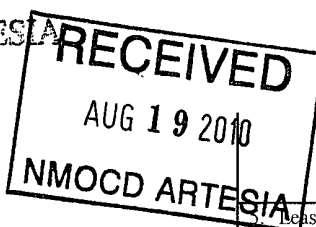


OCD-ARTESIA



A-15-10-565  
EA-10-875

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		6. If Indian, Allottee or Tribe Name N/A
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No N/A
2. Name of Operator Yates Petroleum Corporation (025575)		8. Lease Name and Well No. <b>36277</b> Juniper BIP Federal #11H
3a. Address 105 South Fourth Street, Artesia, NM 88210	3b. Phone No. (include area code) 505-748-1471	9. API Well No. 30-015-38152
4. Location of well (Report location clearly and in accordance with any State requirements *) At surface 660' FNL & 330' FWL, Surface Hole Location (D) At proposed prod zone 660' FNL & 330' FEL, Bottom Hole Location		10. Field and Pool, or Exploratory Undesignated Bone Springs
14. Distance in miles and direction from the nearest town or post office* The well is approximately 8 miles east of Malaga, NM.		11. Sec., T, R, M., or Blk. And Survey or Area Section 9, T24S-R29E
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drlg unit line, if any) 660'	16. No. of acres in lease 878.94	12. County or Parish Eddy
17. Spacing Unit dedicated to this well N2N2 of Section 9-24S-29E	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	13. State NM
19. Proposed Depth 7800' VD; 12240' MD	20. BLM/ BIA Bond No. on file NATIONWIDE BOND #NMB000434	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 2996' GL	22. Approximate date work will start* ASAP	23. Estimated duration 45 days

24. Attachments

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

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by 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 6/82/2010
Title Land Regulatory Agent		
Approved By (Signature) /s/ Don Peterson	Name (Printed/ Typed)	Date AUG 12 2010
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 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

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

KZ 09/13/10

**Approval Subject to General Requirements  
& Special Stipulations Attached**

DISTRICT I  
1825 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 15, 2009

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 <b>30-015</b>	Pool Code <b>11520</b>	Pool Name <b>CEDAR CANYON</b> Undesignated Bone Spring
Property Code <b>36237</b>	Property Name <b>JUNIPER "BIP" FEDERAL</b>	Well Number <b>11H</b>
OGRID No. <b>025575</b>	Operator Name <b>YATES PETROLEUM CORP.</b>	Elevation <b>3001'</b>

Surface Location

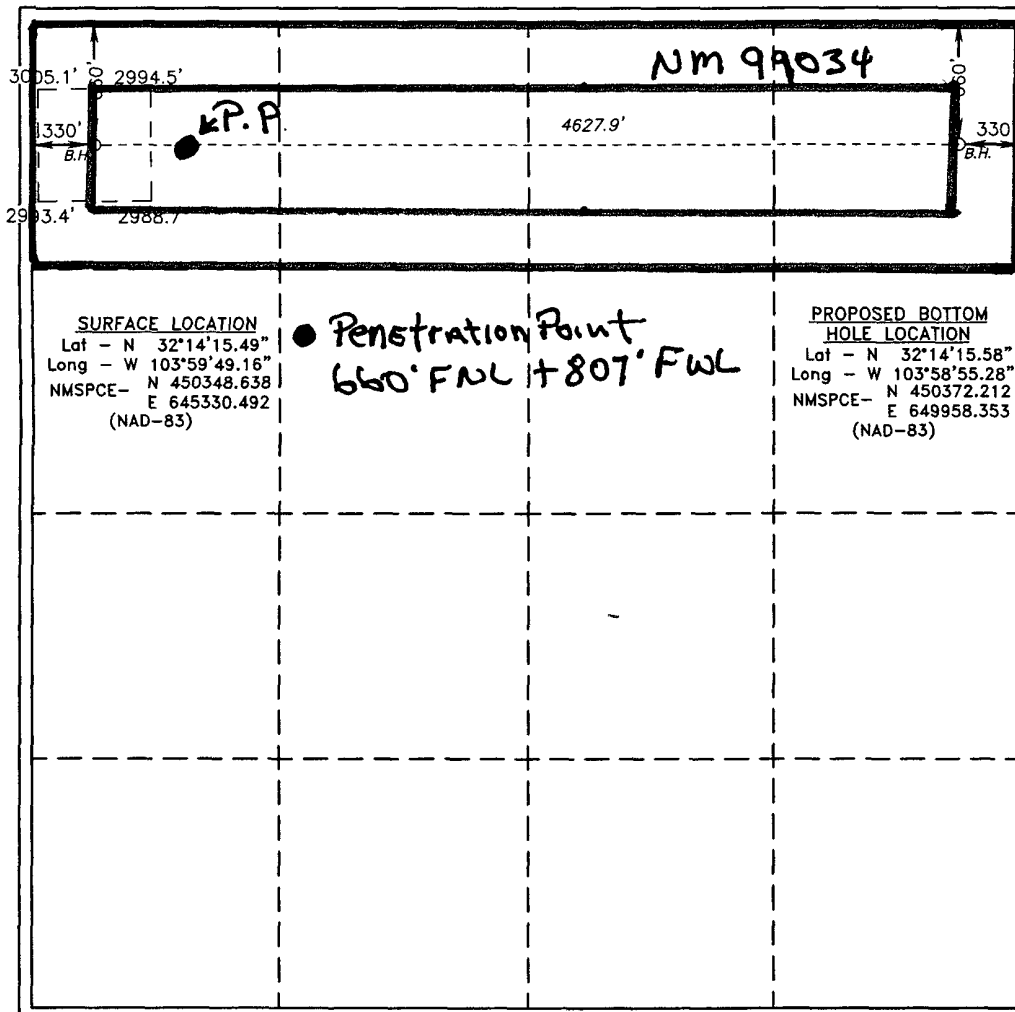
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	9	24 S	29 E		660	NORTH	330	WEST	EDDY

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
A	9	24 S	29 E		660	NORTH	330	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location 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.

**Cy Cowan** 6/8/10  
Signature Date

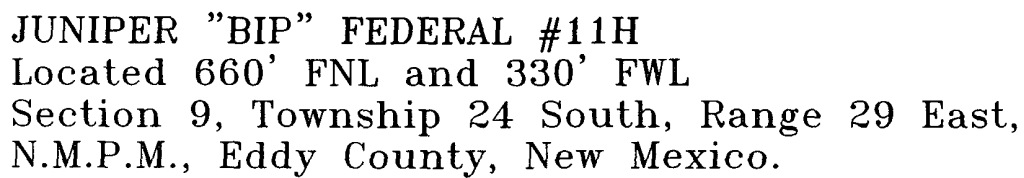
**Cy Cowan, Land Regulatory**  
Printed Name Agent

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.

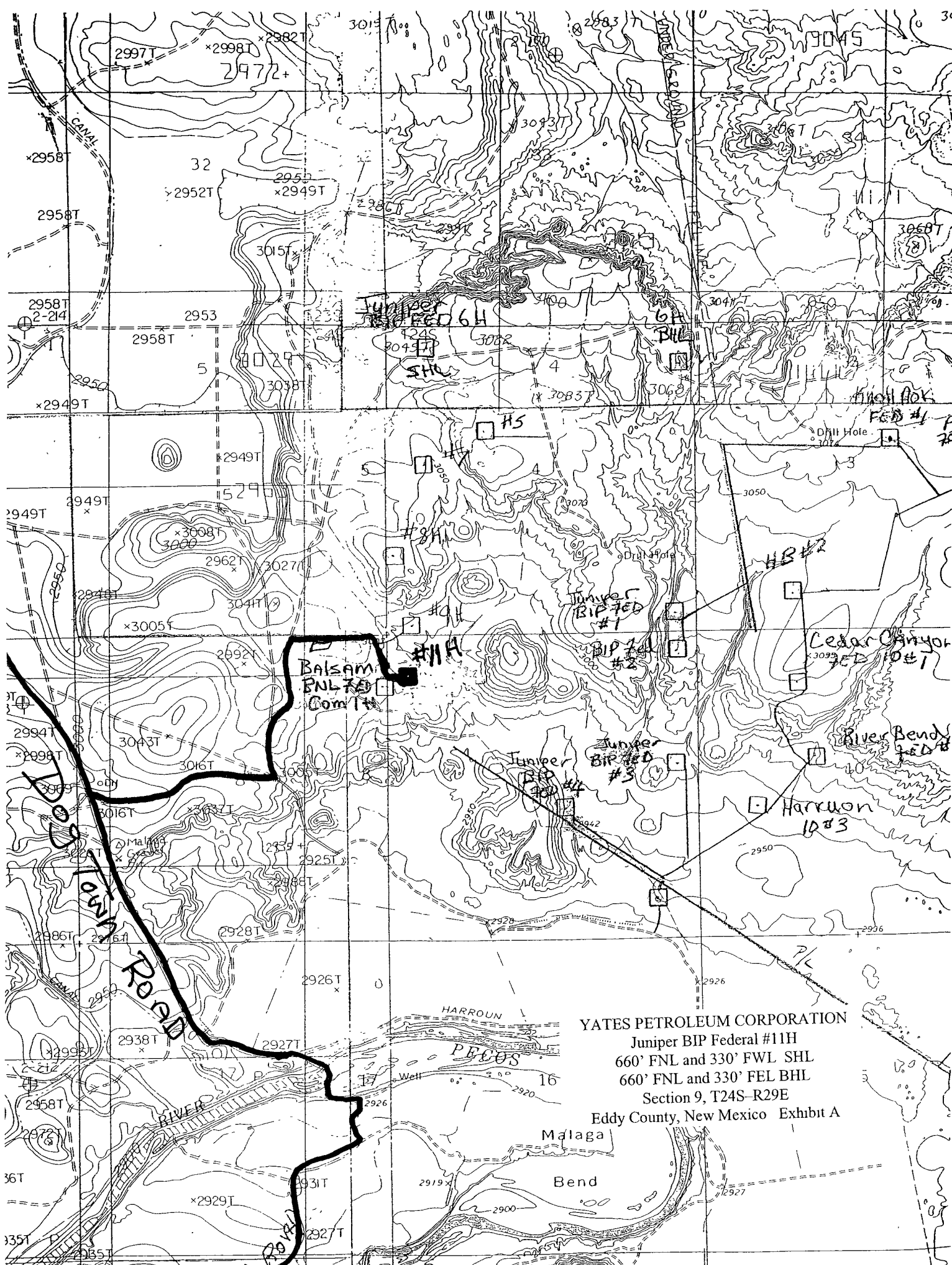
**APR 22, 2010**  
Date Surveyed  
**NEW MEXICO**  
Professional Surveyor  
7977  
Certificate No. **6471 Jones** 7977

BASIN SURVEYS

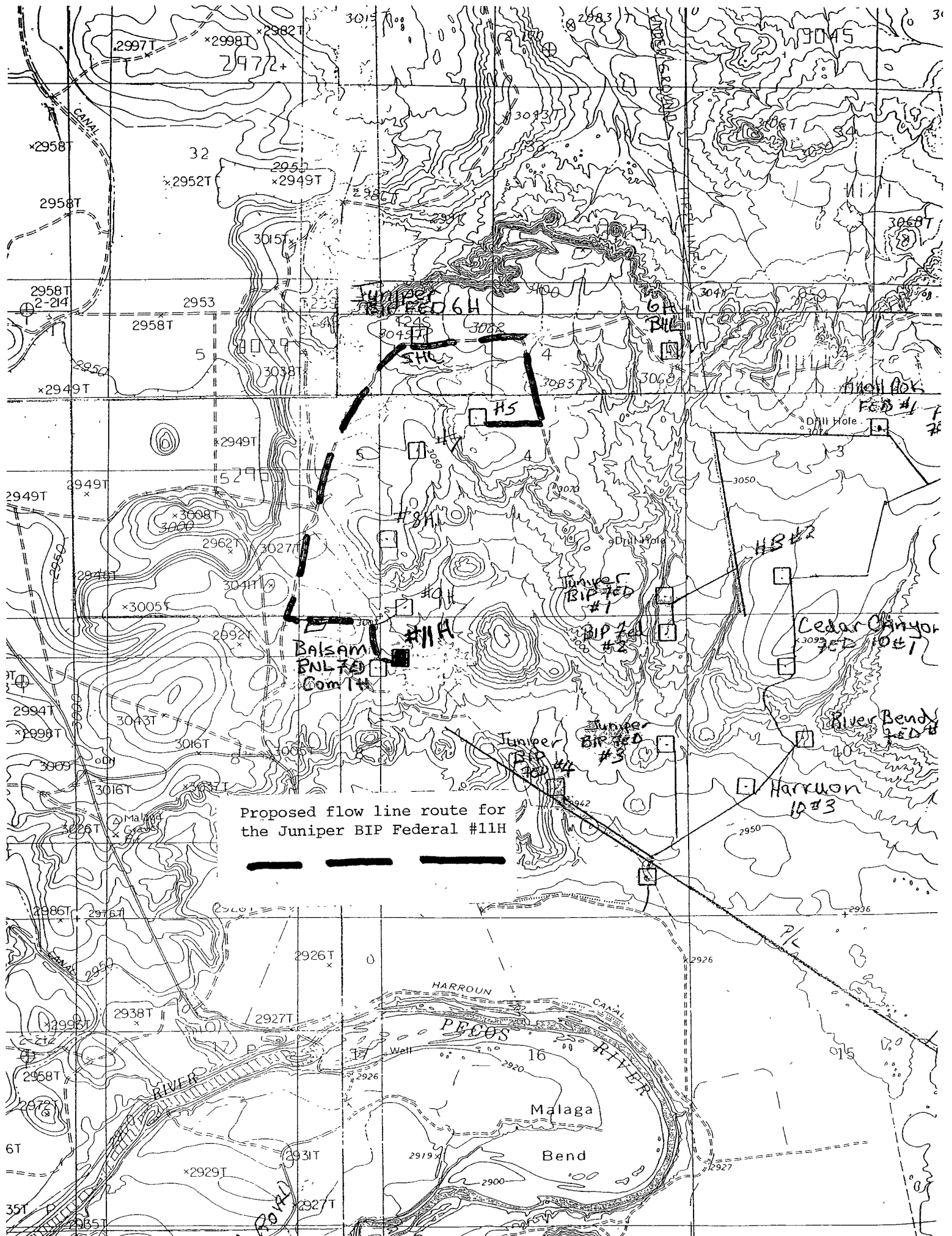


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Survey Date: 04-27-2010  
Scale: 1" = 2 Miles  
Date: 04-29-2010

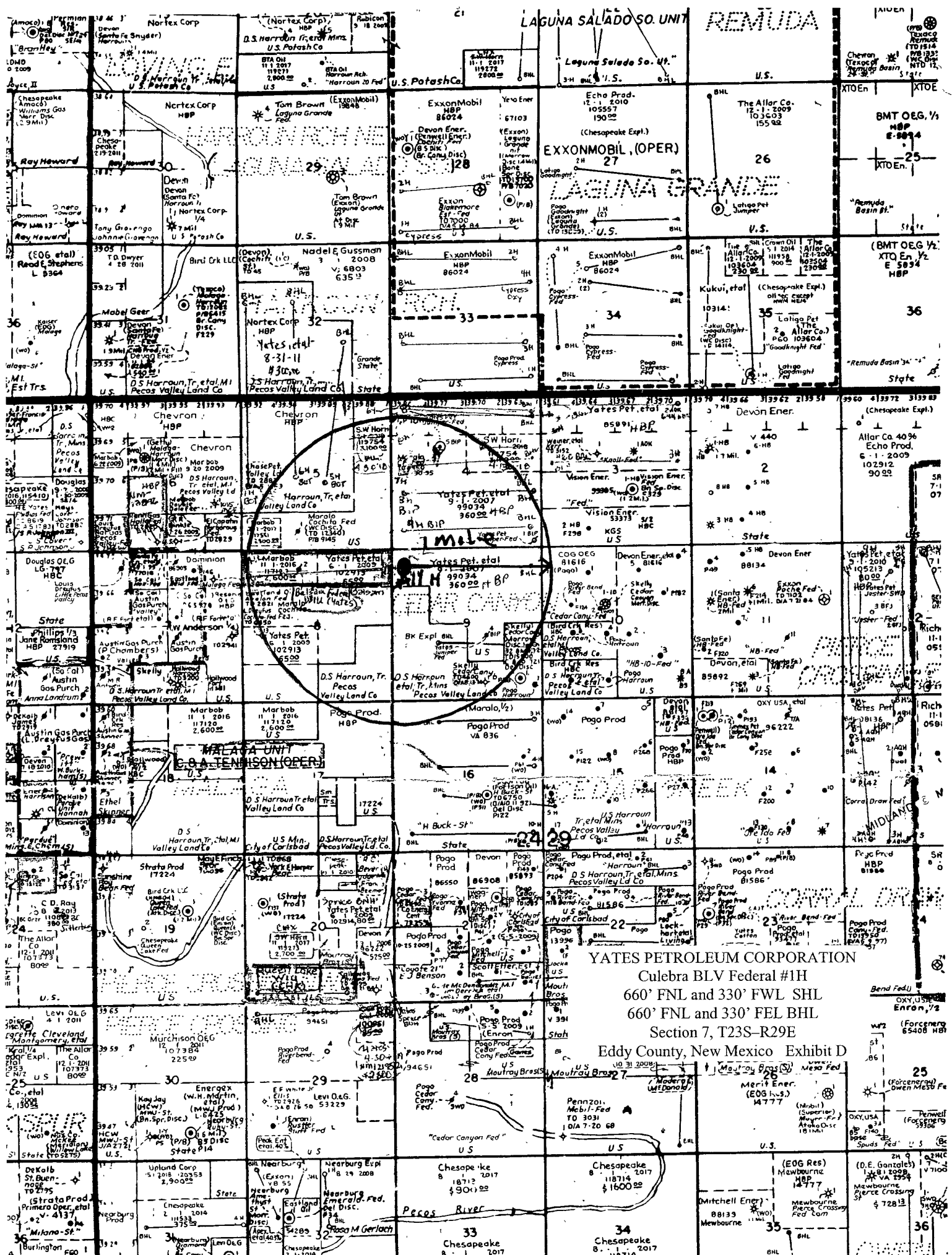
YATES  
PETROLEUM  
CORP.



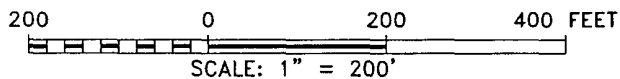
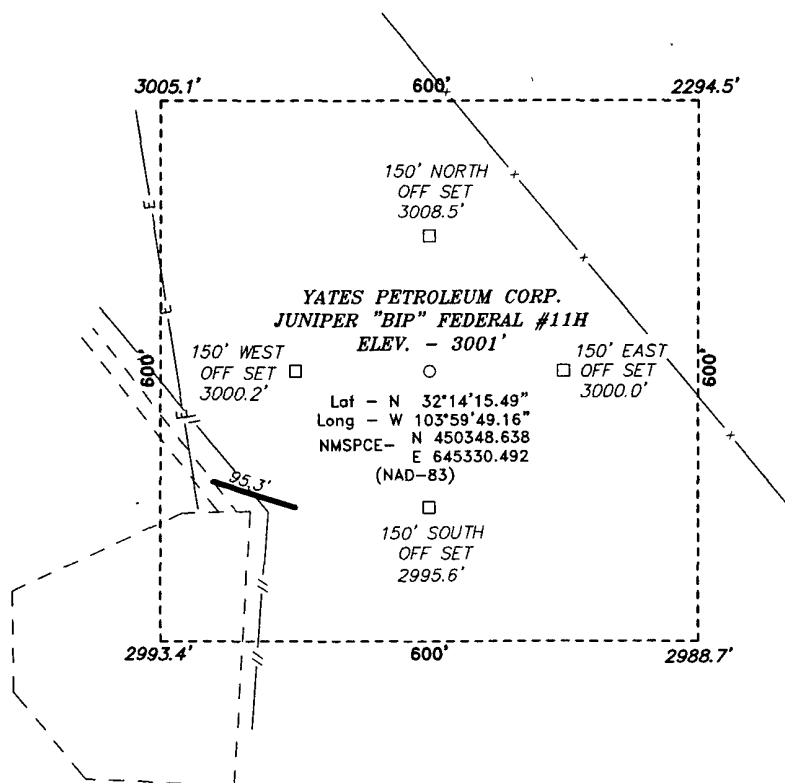
YATES PETROLEUM CORPORATION  
Juniper BIP Federal #11H  
660' FNL and 330' FWL SHL  
660' FNL and 330' FEL BHL  
Section 9, T24S-R29E  
Eddy County, New Mexico Exhibit A



Proposed flow line route for  
the Juniper BIP Federal #11H



SECTION 9, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



**YATES PETROLEUM CORP.**

REF: JUNIPER "BIP" FEDERAL #11H / WELL PAD TOPO

THE JUNIPER "BIP" FEDERAL #11H LOCATED 660'  
FROM THE NORTH LINE AND 330' FROM THE WEST LINE OF  
SECTION 9, TOWNSHIP 24 SOUTH, RANGE 29 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 22664

Drawn By: J. SMALL

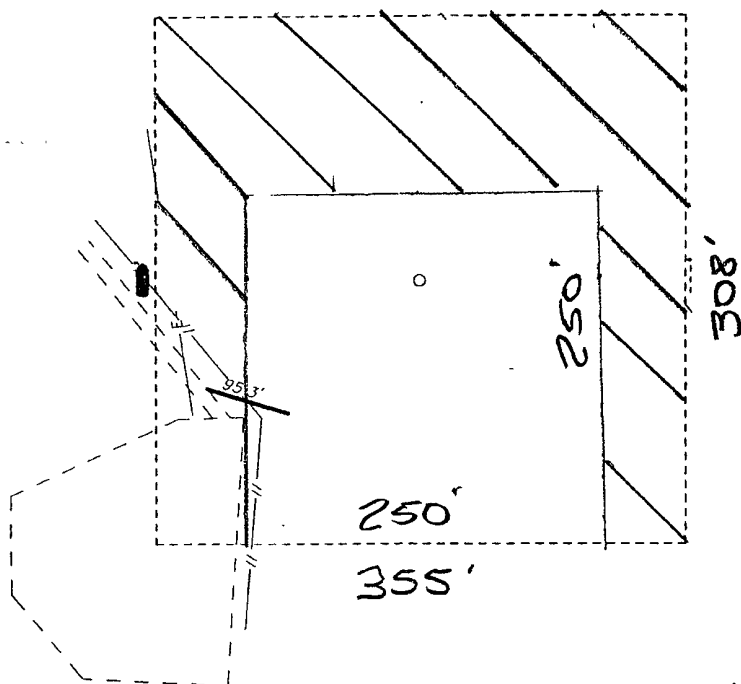
Date: 04-29-2010

Disk: 22664

Survey Date: 04-27-2010

Sheet 1 of 1 Sheets

SECTION 9, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.

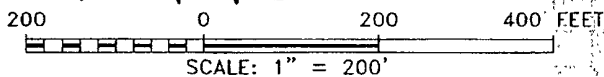


PLEASE Note:  
Reclamation of this  
Well may change After  
Completion operations.  
A sundry notice will be  
Submitted with a sight  
Security Plan if necessary  
AT That time.

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

Reclaimed  
Area  
(Possible)

Not to Scale



**YATES PETROLEUM CORP.**

REF: JUNIPER "BIP" FEDERAL #11H / WELL PAD TOPO

THE JUNIPER "BIP" FEDERAL #11H LOCATED 660'  
FROM THE NORTH LINE AND 330' FROM THE WEST LINE OF  
SECTION 9, TOWNSHIP 24 SOUTH, RANGE 29 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

W.O. Number: 22664 Drawn By: J. SMALL

Date: 04-29-2010 Disk: 22664

Survey Date: 04-27-2010

Sheet 1 of 1 Sheets



YATES PETROLEUM CORPORATION  
 Juniper "BIP" Federal #11H  
 660' FNL and 330' FWL Surface Hole Location  
 660' FNL & 330' FEL Bottom Hole Location  
 Section 9-T24S-R29E  
 Eddy County, New Mexico

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

Rustler	300'	Brushy Canyon	5050'-Oil
Top of Salt	630'	Brushy Canyon Marker	6300'
Bottom of Salt	2730'	Bone Springs	6600'-Oil
Bell Canyon	2970' Oil	First Bone Springs	7680'-Oil
Cherry Canyon	3820'-Oil	Target Zone	7800'-Oil
		TMD(Lateral)	12215'

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

Water: 35'  
 Oil or Gas: Oil Zones: 2970', 3820', 5050', 6600', 7680' & 7800'.

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" and 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	0-600'	600'
12 1/4"	9 5/8"	36#	J-55	ST&C	0-2850'	2850'
7 7/8"	5.1/2"	17#	HCP- 110	LT&C	0'-8100'	8100'
7 7/8"	5 1/2"	17#	L-80	LT&C	8100'-12215'	4115'

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

B. CEMENTING PROGRAM:

Surface Casing: Lead with 350 sacks Class C (Wt. 14.80 Yld 1.64). Tail in with 200 sacks Class C (Wt. 14.80 Yld. 1.34). TOC surface.

Intermediate Casing: Lead with 750 sacks of C Lite (Wt 12.50 Yld 2.00). Tail in with 200 sacks C (Wt. 14.80 Yld. 1.32). TOC surface

Production Casing: cemented in three stages with stage tools at 7000' and 4200'

Stage One: 1425 sacks Pecos Valley Lite (Wt. 13.00 Yld. 1.41). TOC 7000'.  
Stage Two: 1000 sacks Pecos Valley Lite (Wt 13.00 Yld. 1.41). TOC 4200'.  
Stage Three: 675 sacks Pecos Valley Lite (Wt. 13.00 Yld 1.41). TOC 2350'.

Well will be drilled directionally to 7323' MD. At 7323' MD well will be kicked off at 12 degrees per 100' with a 8 3/4" hole to 8100' MD (7800' TVD). If hole conditions dictate, 7" casing will be set. A 6 1/8" hole will then be drilled to 12215 MD (7800'TVD) where 4 1/2" casing will be set and cemented. If 7" is not set, then hole size will be reduced to 7 7/8" and drilled to 12,215' MD (7800' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 660' FNL & 807' FWL, 9-24S-29E. Deepest TVD in the well is 7800' in the lateral.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-600'	Fresh Water	8.60-9.20	29-36	N/C
600'-2850'	Brine Water	10.00-10.20	28-30	N/C
2850'-7323'	Cut Brine	8.90-9.10	28-29	N/C
7323'-12215'	Cut Brine(Lateral Section)	8.60-9.00	28-34	<15

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'. 10' samples from 3000' to TD. Mudloggers on at surface casing  
Logging: Platform Hals-CMR  
Coring: None anticipated  
DST's: None Anticipated

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

Maximum Anticipated BHP:  
0'-600' 287 PSI  
600'-2850' 1512 PSI  
2850'-7800' 3650 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 60 days to drill the well with completion taking another 20 days.

## Juniper BIP Federal #11H

### Contingency Casing Design

If hole conditions dictate, 7" casing will be set at 8,100' MD (7,800' TVD) A 6 1/8" hole will then be drilled to 12,215' MD (7,800' 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 7000'

#### 2nd Intermediate

0 ft to 100 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	

100 ft to 5,800 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	5,700
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift	
3,270	4,360 psi	313 ,000 #		366 ,000 #		6.25	

5,800 ft to 8,100 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	2,300
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift	
4,320 psi	4,980 psi	367 ,000 #		415 ,000 #		6.151	

DV tools placed at 7000' and 4200'.

Stage I: Cemented w/240sx PVL (YLD 1.41 Wt 13) TOC= 7000'

Stage II Cemented w/600sx PVL (YLD 1 41 Wt 13) TOC= 4200'

Stage III Cemented w/150sx Lite Crete (YLD 2.78 Wt 9 9), tail w/100sx PVL (YLD 1 41 Wt 13) TOC= 2350'

#### Production

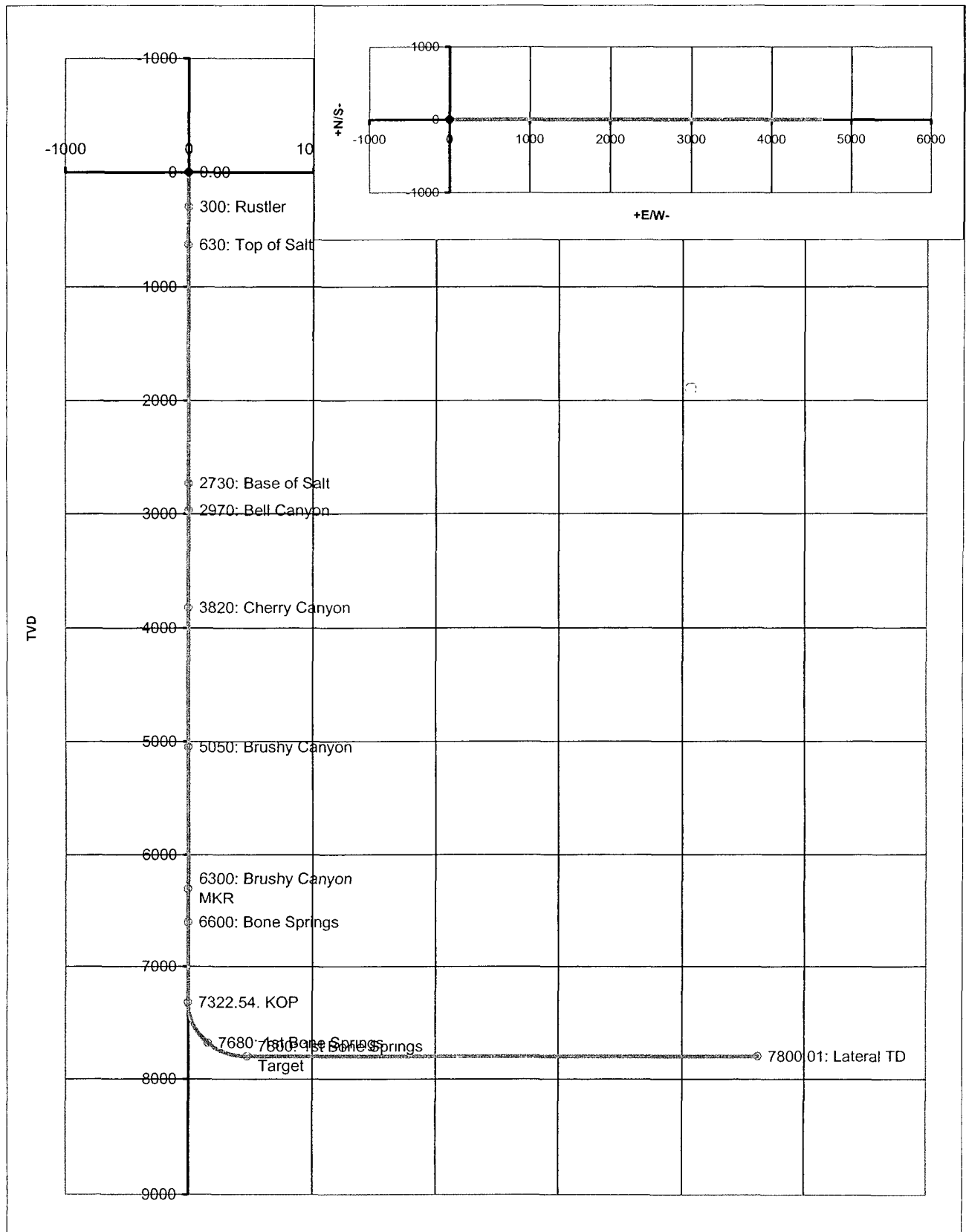
0 ft to 12,215 ft				Make up Torque ft-lbs			Total ft =
O D.	Weight	Grade	Threads	opt.	min.	mx.	
4.5 inches	11.6 #/ft	HCP-110	LT&C	3020	2270	3780	12,215
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift	
8,650 psi	10,690 psi	279 ,000 #		367 ,000 #		3.875	

DV tool placed at approx 7000' and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 7000'.

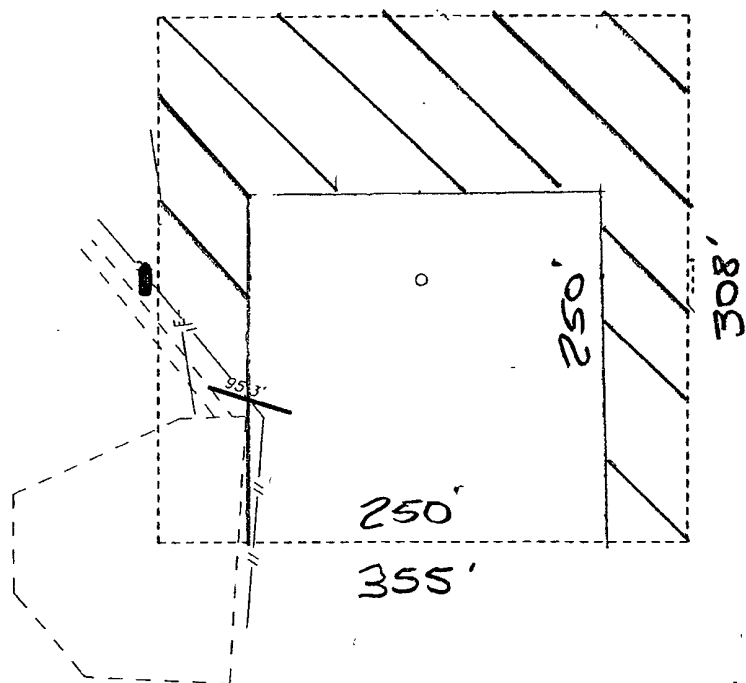
Cemented w/700sx PVL (YLD 1 41 Wt 13) TOC= 7000'

Co: Yates Petroleum	Units: Feet, ° 1100ft	VS Az: 90.00	Tgt TVD: 7800.00
Drillers: 0	Elevation:	Tgt Radius: 0.00	Tgt MD: 0.00
Well Name: Juniper BIP Federal #11H	Northing:	Tgt N/S: 0.00	Tgt Displ.: 0.00
Location: Sect. 9, 24S-29E	Easting:	Tgt E/W: 4620.00	Method: Minimum Curvature

No.	MD	CL	Inc.	Azi.	TVD	VS	+N/S-	+E/W-	BR	WR	DLS	Comments
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
1	300.00	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	Rustler
2	630.00	330.00	0.00	0.00	630.00	0.00	0.00	0.00	0.00	0.00	0.00	Top of Salt
3	2730.00	2100.00	0.00	0.00	2730.00	0.00	0.00	0.00	0.00	0.00	0.00	Base of Salt
4	2970.00	240.00	0.00	0.00	2970.00	0.00	0.00	0.00	0.00	0.00	0.00	Bell Canyon
5	3820.00	850.00	0.00	0.00	3820.00	0.00	0.00	0.00	0.00	0.00	0.00	Cherry Canyon
6	5050.00	1230.00	0.00	0.00	5050.00	0.00	0.00	0.00	0.00	0.00	0.00	Brushy Canyon
7	6300.00	1250.00	0.00	0.00	6300.00	0.00	0.01	0.00	0.00	0.00	0.00	Brushy Canyon MKR
8	6600.00	300.00	0.00	0.00	6600.00	0.00	0.01	0.00	0.00	0.00	0.00	Bone Springs
9	7322.54	7322.54	0.00	90.00	7322.54	0.00	0.01	0.00	0.00	1.23	0.00	KOP
10	7400.00	77.46	9.30	90.00	7399.66	6.27	0.01	6.27	12.00	0.00	12.00	
11	7500.00	100.00	21.30	90.00	7495.94	32.60	0.01	32.60	12.00	0.00	12.00	
12	7600.00	100.00	33.30	90.00	7584.64	78.38	0.01	78.38	12.00	0.00	12.00	
13	7700.00	100.00	45.30	90.00	7661.89	141.60	0.01	141.60	12.00	0.00	12.00	
14	7726.49	403.96	48.48	90.00	7680.00	160.93	0.01	160.93	12.00	0.00	12.00	1st Bone Springs
15	7800.00	73.51	57.30	90.00	7724.31	219.49	0.01	219.49	12.00	0.00	12.00	
16	7900.00	100.00	69.30	90.00	7769.16	308.66	0.01	308.66	12.00	0.00	12.00	
17	8000.00	100.00	81.30	90.00	7794.50	405.21	0.01	405.21	12.00	0.00	12.00	
18	8072.53	750.00	90.00	90.00	7800.00	477.46	0.01	477.46	12.00	0.00	12.00	1st Bone Springs Target
19	12215.07	4142.54	90.00	90.00	7800.01	4620.00	0.00	4620.00	0.00	0.00	0.00	Lateral TD



SECTION 9, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



PLEASE Note:  
Reclamation of this  
well may change after  
completion operations.  
A sundry notice will be  
submitted with a sight  
security plan if necessary  
at that time.

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

W.O. Number. 22664 Drawn By: J. SMALL

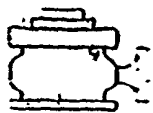
Date: 04-29-2010 Disk: 22664

**YATES PETROLEUM CORP.**

REF: JUNIPER "BIP" FEDERAL #11H / WELL PAD TOPO

THE JUNIPER "BIP" FEDERAL #11H LOCATED 660'  
FROM THE NORTH LINE AND 330' FROM THE WEST LINE OF  
SECTION 9, TOWNSHIP 24 SOUTH, RANGE 29 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

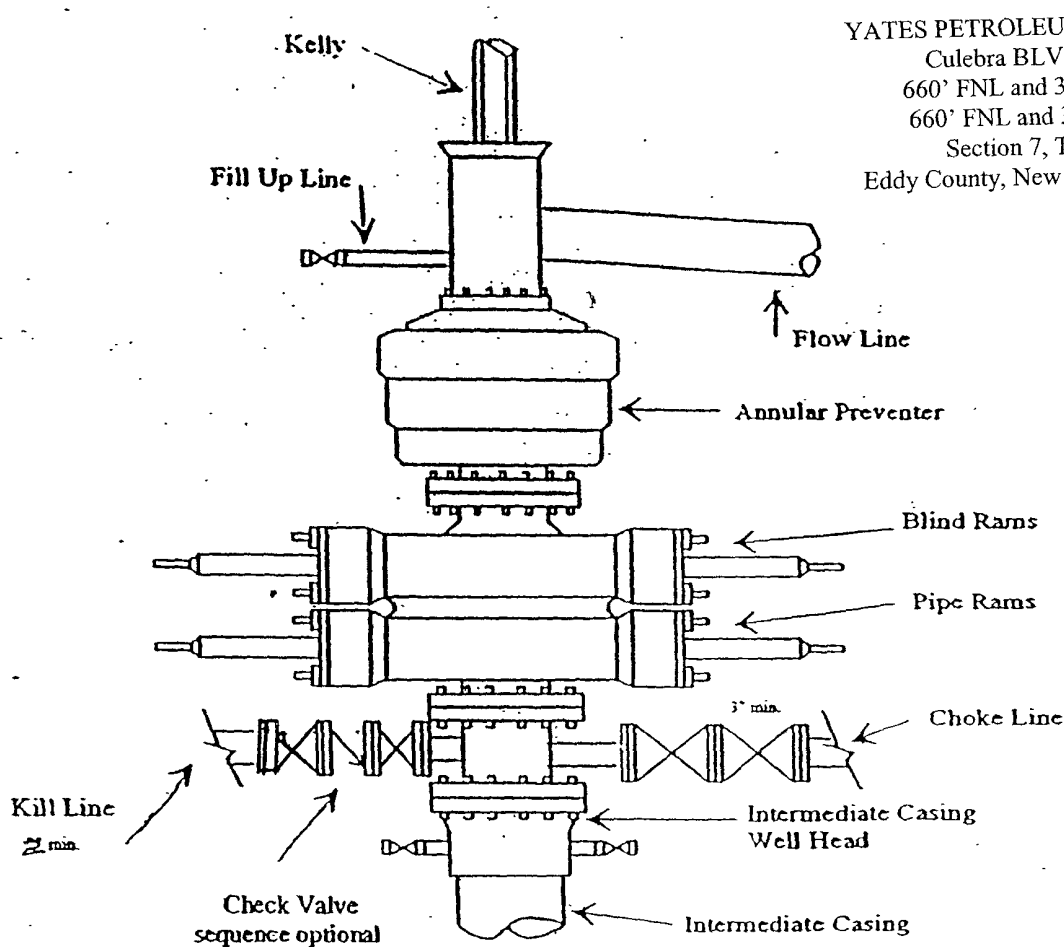
Survey Date: 04-27-2010 Sheet 1 of 1 Sheets



# Yates Petroleum Corporation

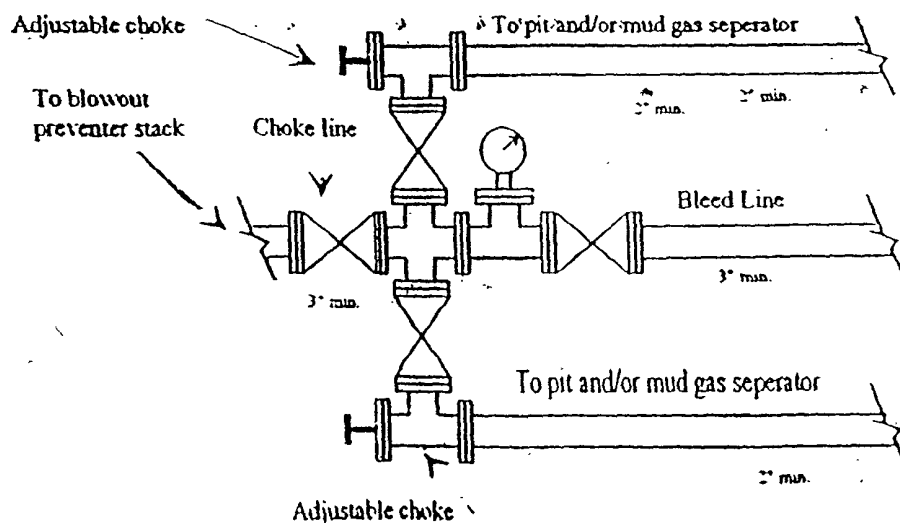
BOP-3

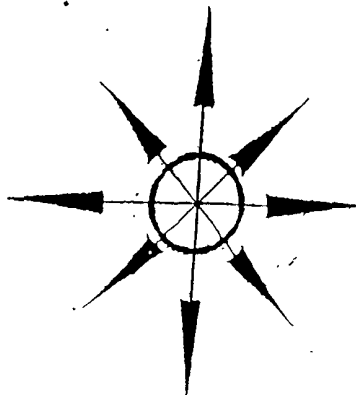
## Typical 3,000 psi Pressure System Schematic Annular with Double Ram Preventer Stack



YATES PETROLEUM CORPORATION  
Culebra BLV Federal #1H  
660' FNL and 330' FWL SHL  
660' FNL and 330' FEL BHL  
Section 7, T23S-R29E  
Eddy County, New Mexico Exhibit B

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



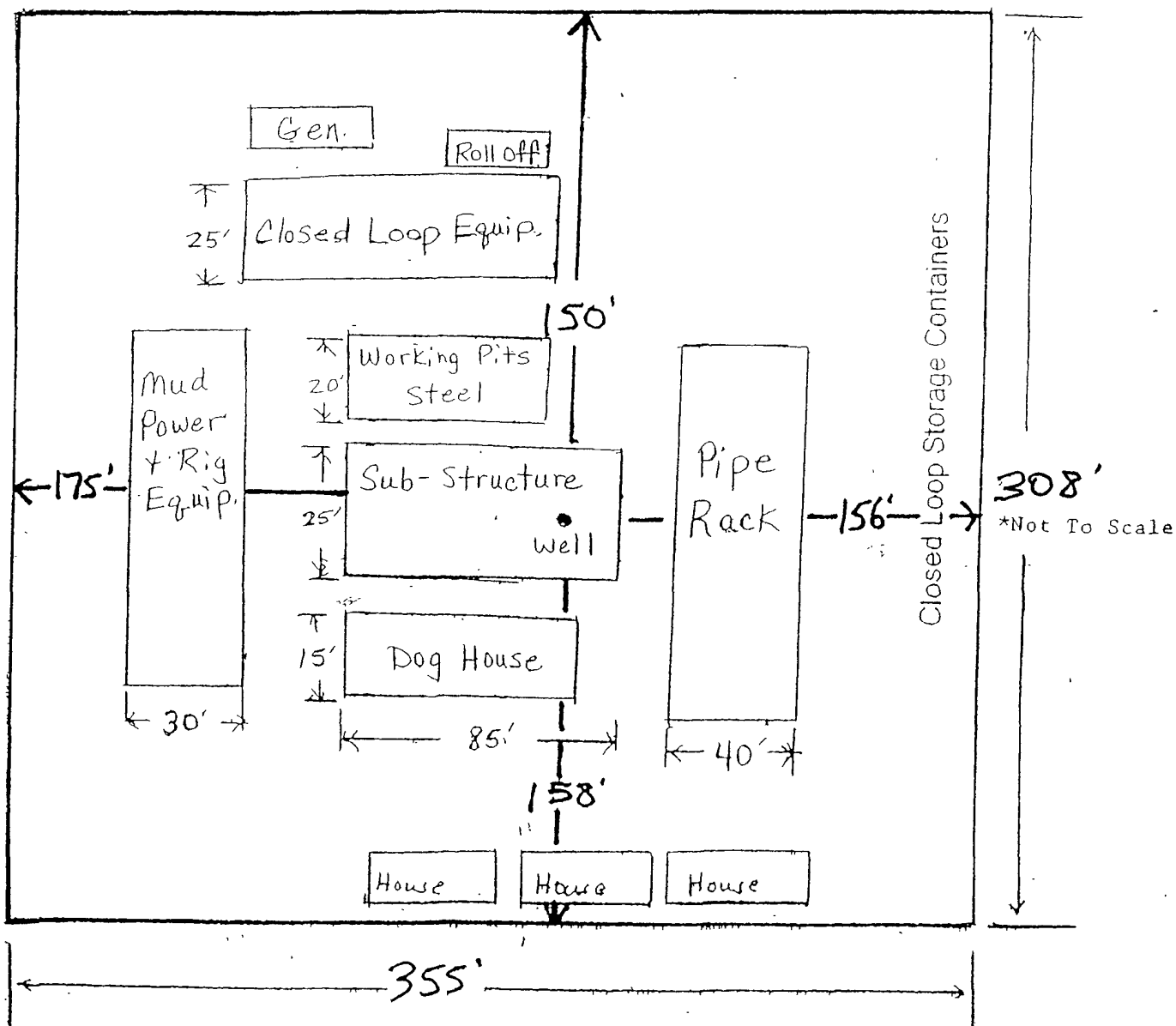


# Yates Petroleum Corporation

Location Layout for Permian Basin

YATES PETROLEUM CORPORATION  
Culebra BLV Federal #1H  
660' FNL and 330' FWL SHL  
660' FNL and 330' FEL BHL  
Section 7, T23S-R29E  
Eddy County, New Mexico Exhibit C

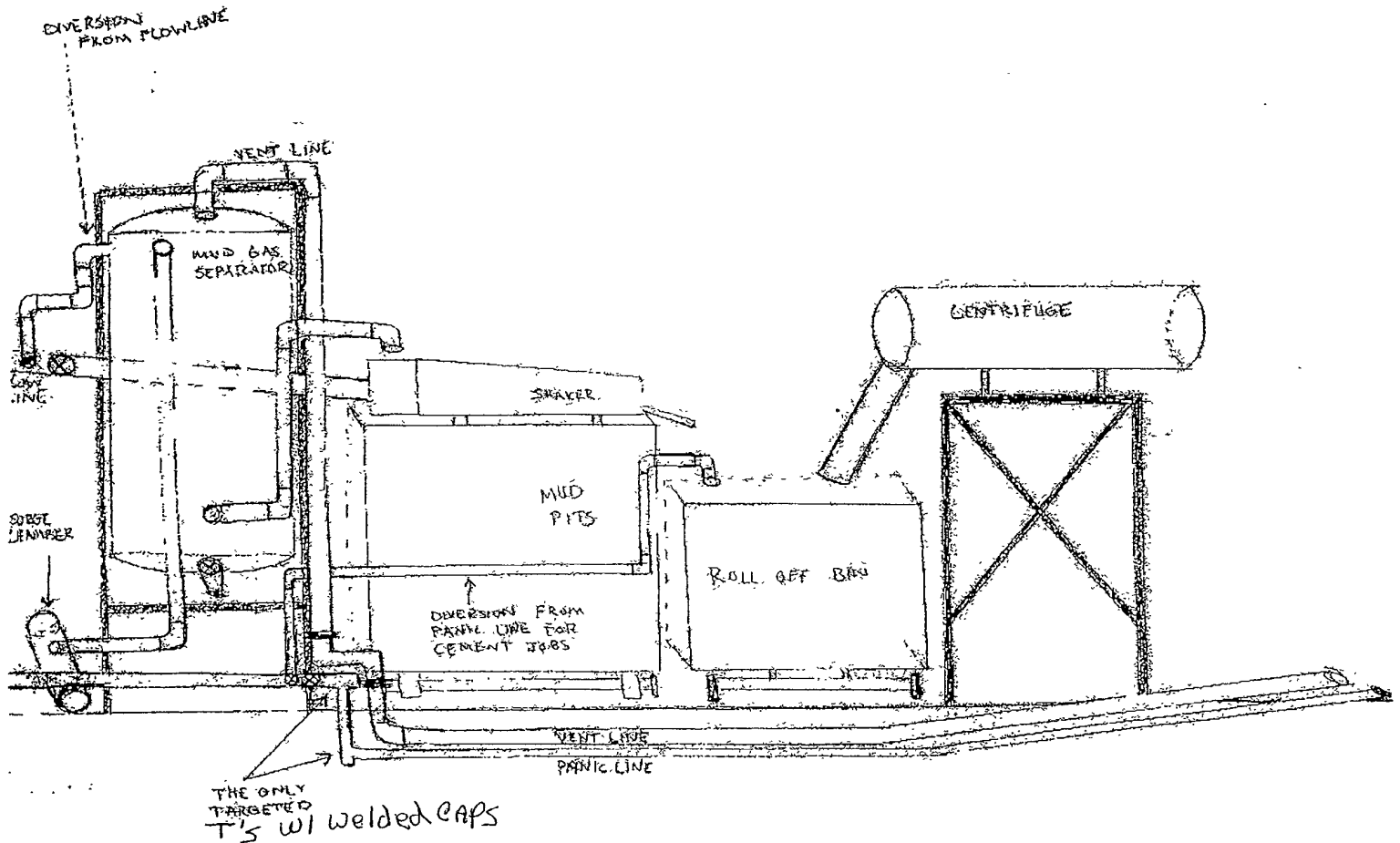
## Closed Loop Design Plan





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

YATES PETROLEUM CORPORATION  
Culebra BLV Federal #1H  
660' FNL and 330' FWL SHL  
660' FNL and 330' FEL BHL  
Section 7, T23S-R29E  
Eddy County, New Mexico Exhibit E



# **Yates Petroleum Corporation**

**105 S. Fourth Street  
Artesia, NM 88210**

## **Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan**

**For**

### **Juniper BIP Federal #11H**

**660' FNL and 330' FWL Surface Hole Location**

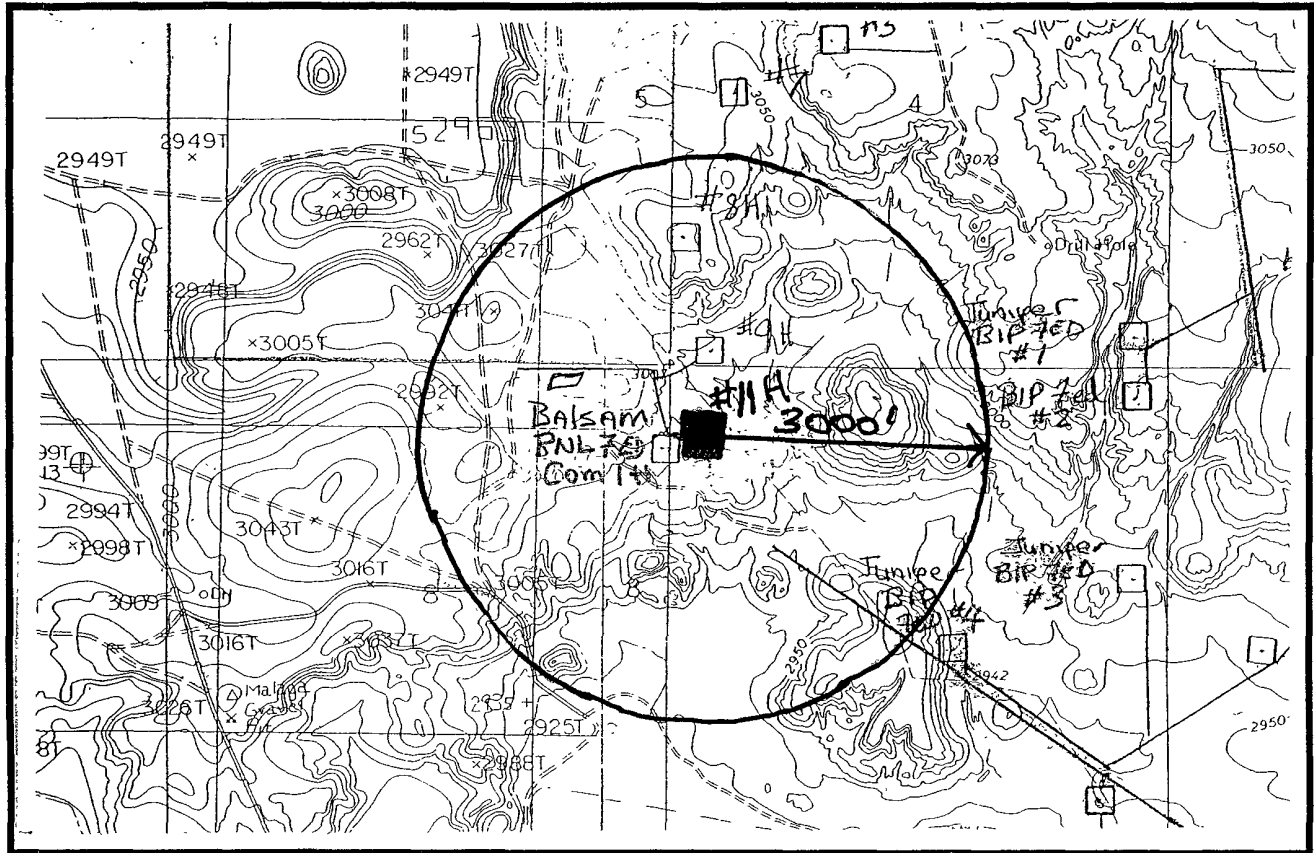
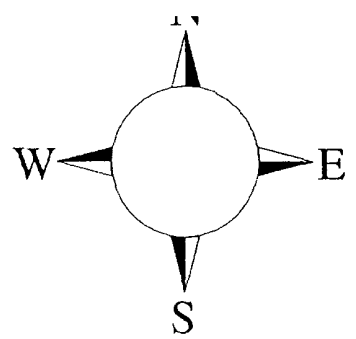
**660' FNL and 330' FEL Bottom Hole Location**

**Section 9, T-24, R-29E**

**Eddy County NM**

## Juniper BIP Federal #11H

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



Assumed 100 ppm ROE = 3000'

100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

### Emergency Procedures

In the case of a release of gas containing H<sub>2</sub>S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S 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 (SO<sub>2</sub>). 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 H<sub>2</sub>S and SO<sub>2</sub>**

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	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***

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YPC Office .....	(575) 748-1471
Darrick Stallings/Operations Manager .....	(575) 748-4198
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

MULTI-POINT SURFACE USE AND OPERATIONS PLAN  
YATES PETROLEUM CORPORATION  
Juniper "BIP" Federal #11H  
660' FNL & 330' FWL, Surface  
660' FNL & 330' FEL, Bottom Hole  
Section 9-T24S-R29E  
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:

Go east of Malaga, NM on Duarte Road (CR-720) for about 0.7 of a mile to Harroun Road (CR-745). Turn left on Harroun Road and go approximately 2.9 miles to Dog Town Road (CR-788). Turn right on Dog Town Road and go approximately 1.1 miles. Turn left here on caliche road and go approximately 0.6 of a mile. Turn left here on lease road going to the north and go approximately 0.6 of a mile or to a point where an east/west powerline crosses the road. Turn right here and follow the existing lease road for approximately 0.3 of a mile. Follow the lease road at this point and go right for approximately .1 of a mile toward the Balsam BNL Federal Com. #1H well location. The new access road will start at the northeast corner of the Balsam BNL Federal Com. #1H going east for approximately 100 feet to the southwest corner of the Juniper BIP Federal #11H well location.

2. PLANNED ACCESS ROAD:

- A The proposed new access road will be approximately 100 feet in length from the point of origin to the southwest corner of the drilling pad.
- B The new road will be 14' 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 will not 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. However if production facilities are needed they will be placed on the location as determined by Yates production personnel and the BLM.
- 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.
- C Production from this well will be taken via surface 3" SDR-11 poly flow line to the tank battery on Yates' Juniper BIP Federal #5 well location in the SE/NW/4 of Section 4, T24S-R29E. The flow line route will be placed in an existing corridor from start to finish. Please note attached map.

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:

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. 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, the closed loop system, the location of the drilling equipment, drilling rig orientation and access road approach. The proposed well location will be approximately 355' x 308'. 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. Interim reclamation will most likely be done on the north and west sides of the location leaving the size of the location approximately 250' x 250'. At the time of the interim reclamation Yates will furnish the BLM with a Sundry Notice detailing the remediation plans.
- 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.

11. SURFACE OWNERSHIP:

Federal Lands under the supervision of the Carlsbad BLM. 620 East Greene Street, Carlsbad, New Mexico 88220. (575) 234-5972.

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.



### 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.
11. After the well has been drilled and completed Yates' Production Department Personnel will meet with BLM Personnel on each individual well location to discuss the specifics of downsizing the well pad at that time. This information will not be available at the time the Application for Permit to Drill is submitted to the Bureau of Land Management office.

# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum
LEASE NO.:	NM-99034
WELL NAME & NO.:	Juniper BIP Federal #11H
SURFACE HOLE FOOTAGE:	660' FNL & 330' FWL
BOTTOM HOLE FOOTAGE:	660' FNL & 330' FEL
LOCATION:	Section 9, T. 24 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico

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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**
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- ☐ **Production (Post Drilling)**
  - Well Structures & Facilities
  - Pipelines
  - Electric Lines
- ☒ **Interim Reclamation**
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## **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)**

### **Lessee's fence**

Rerouting of lessee's fence if necessary to accommodate the northeast corner of the well pad.

## **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. V-DOOR DIRECTION: East**

### **C. 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 6 inches in depth. The topsoil will be used for interim and final reclamation.

### **D. CLOSED LOOP SYSTEM**

Tanks are required for drilling operations: No Pits.

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

### **E. 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.

### **F. 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.

### **G. 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**

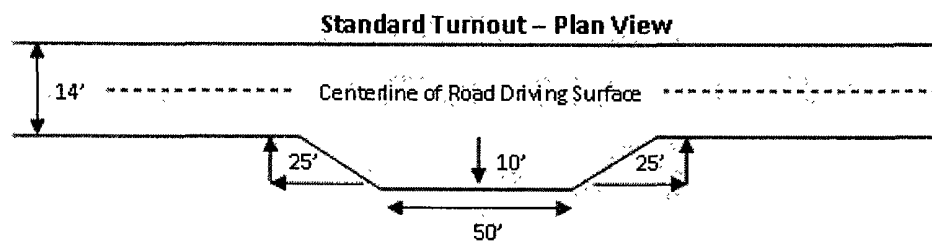
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

### **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:

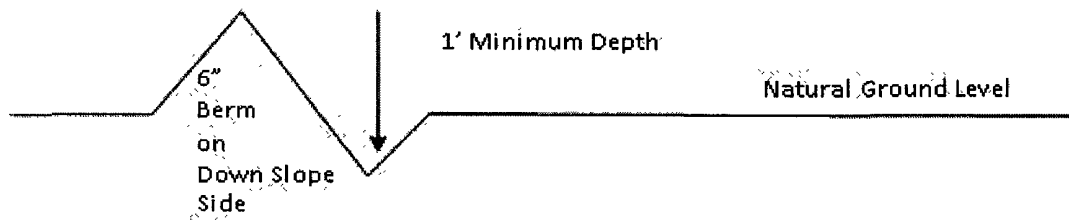


### **Drainage**

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

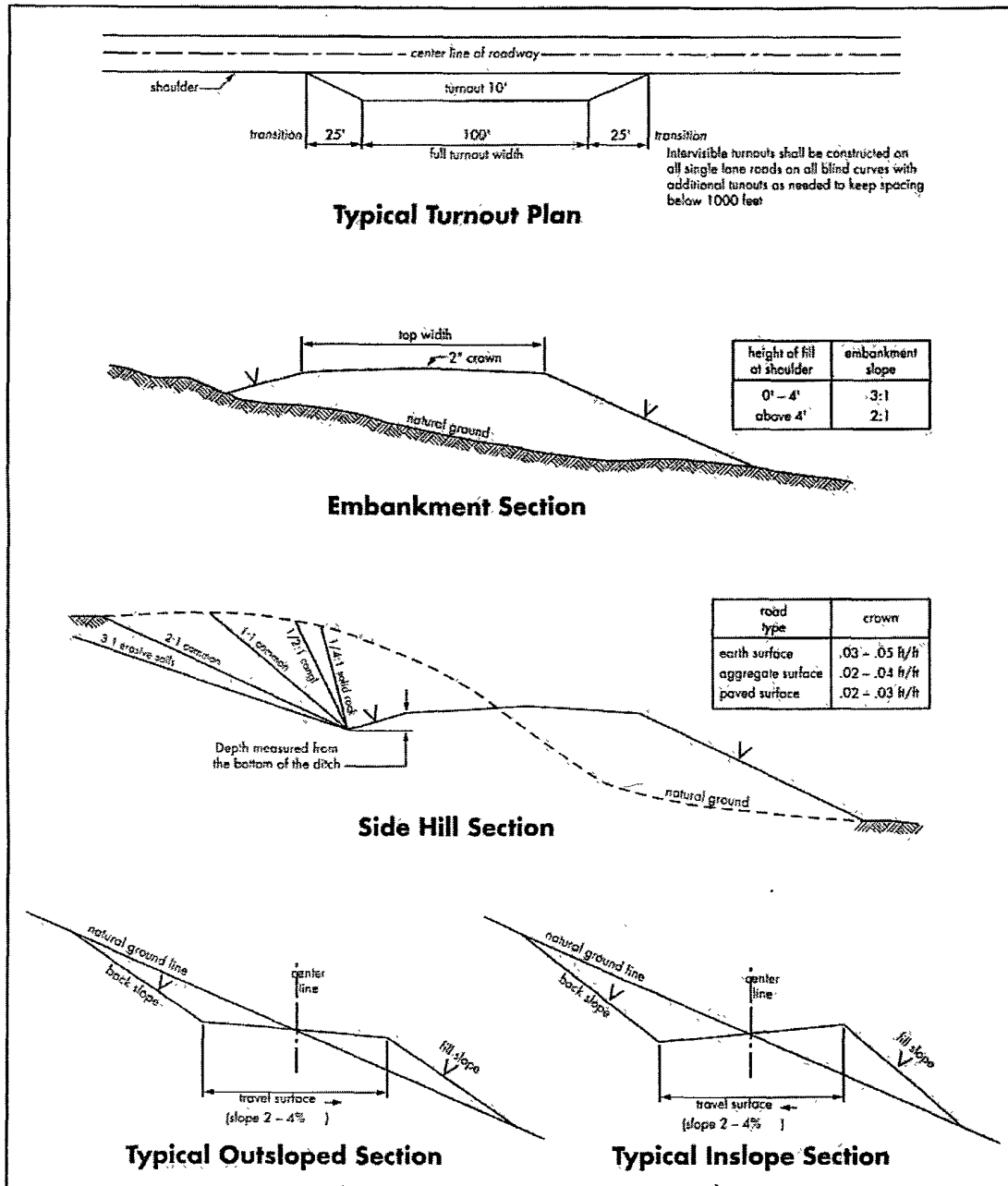
The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

**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 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 the area, 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. **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) will 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 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 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.**

**Medium Cave/Karst**

**Possible lost circulation in the Delaware and Bone Spring.**

**Possible water flows in the Salado, Castile, Delaware, and Bone Spring.**

1. The 13-3/8 inch surface casing shall be set at **approximately 600 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. **If salt is encountered, set casing shoe 25 feet above the top of salt.**
  - 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.
2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
  - ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

**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. Operator should have plans as to how they will achieve circulation on the next stage.
  - 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. Operator should have plans as to how they will achieve circulation on the next stage.
  - 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**

4. The minimum required fill of cement behind the 7 inch second 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. Operator should have plans as to how they will achieve circulation on the next stage.
  - 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. Operator should have plans as to how they will achieve circulation on the next stage.
  - 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.
5. The minimum required fill of cement behind the 4-1/2 inch production casing is:
- ☒ Cement should tie-back to a depth of approximately 7000 feet. Operator shall provide method of verification. **Casing to be cut and pulled from TOC.**

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

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.
  - d. **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 or where the float does not hold, the minimum wait time before cut-off is eight hours after bumping the plug or when the cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. BOP/BOPE testing can begin after the above conditions are satisfied.
  - 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) prior to initiating the test.
  - c. The results of the test shall be reported to the appropriate BLM office.
  - d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

- e. 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.

#### **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.

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## **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 grant 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. All construction and maintenance activity will be confined to the authorized right-of-way width of 25 feet.
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.

**C. ELECTRIC LINES**

## **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

\*Pounds of pure live seed:

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