

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-3 APD form.

Operator Signature Date: 10/15/2016

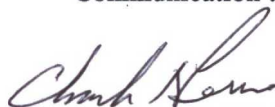
Well information:

Operator WPX, Well Name and Number 10 Lybrook Unit 712H

API# 30-045-35776, Section 13, Township 23 N/S, Range 9 E/W

Conditions of Approval: (See the below checked and handwritten conditions)

- ☒ Notify Aztec OCD 24hrs prior to casing & cement.
- ☒ Hold C-104 for directional survey & "As Drilled" Plat
- ☒ Hold C-104 for NSL, NSP, DHC
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☐ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
 - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
 - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
 - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- ☐ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- ☐ Submit Gas Capture Plan form prior to spudding or initiating recompletion operations
- ☒ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ☒ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
- ☒ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.


NMOCD Approved by Signature

2-14-2017
Date

16

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.
N0G13121856

6. If Indian, Allottee or Tribe Name
WESTERN NAVAJO

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator
WPX ENERGY LLC

7. If Unit or CA Agreement, Name and No.

NMNM-135216A

8. Lease Name and Well No.
W LYBROOK UT / 712H

9. API Well No.

30-045-35776

3a. Address
720 S MAIN AZTEC NM 87410

3b. Phone No. (include area code)
(505)333-1822

10. Field and Pool, or Exploratory
LYBROOK MANCOS W

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface F LOT 0 / 1999 FNL / 2478 FWL / LAT 36.228719 / LONG -107.740861

At proposed prod. zone G LOT 0 / 2385 FNL / 2291 FEL / LAT 36.242058 / LONG -107.757103

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 13 / T23N / R9W / NMP

14. Distance in miles and direction from nearest town or post office*

12. County or Parish
SAN JUAN

13. State
NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)
20 feet

16. No. of acres in lease
160

17. Spacing Unit dedicated to this well

160

320

OIL CONS. DIV DIST. 3

18. Distance from proposed location*
to nearest well, drilling, completed, 1999 feet
applied for, on this lease, ft.

19. Proposed Depth
4780 feet / 12086 feet

20. BLM/BIA Bond No. on file

IND: B001576

JAN 31 2017

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
6700 feet

22. Approximate date work will start*
07/01/2016

23. Estimated duration
30 days

24. Attachments

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

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).

5. Operator certification

6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature
(Electronic Submission)

Name (Printed/Typed)
Lacey Granillo / Ph: (505)333-1816

Date
06/15/2016

Title

Permitting Tech III

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office
FARMINGTON

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

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

(Continued on page 2)

*(Instructions on page 2)

DRILLING OPERATIONS AUTHORIZED
ARE SUBJECT TO COMPLIANCE WITH
ATTACHED "GENERAL REQUIREMENTS"

BLM'S APPROVAL OR ACCEPTANCE OF THIS
ACTION DOES NOT RELIEVE THE LESSEE AND
OPERATOR FROM OBTAINING ANY OTHER
AUTHORIZATION REQUIRED FOR OPERATIONS
ON FEDERAL AND INDIAN LANDS

DRILLING OPERATIONS AUTHORIZED
ARE SUBJECT TO COMPLIANCE WITH
ATTACHED "GENERAL REQUIREMENTS"

NMOCDAV

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

AMENDED REPORT
OIL CONS. DIV DIST. 3

FEB 06 2017

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35776		*Pool Code 98157		*Pool Name LYBROOK MANCOS W	
*Property Code 315250		*Property Name W LYBROOK UNIT			*Well Number 712H
*GRID No. 120782		*Operator Name WPX ENERGY PRODUCTION, LLC			*Elevation 6700'

10 Surface Location

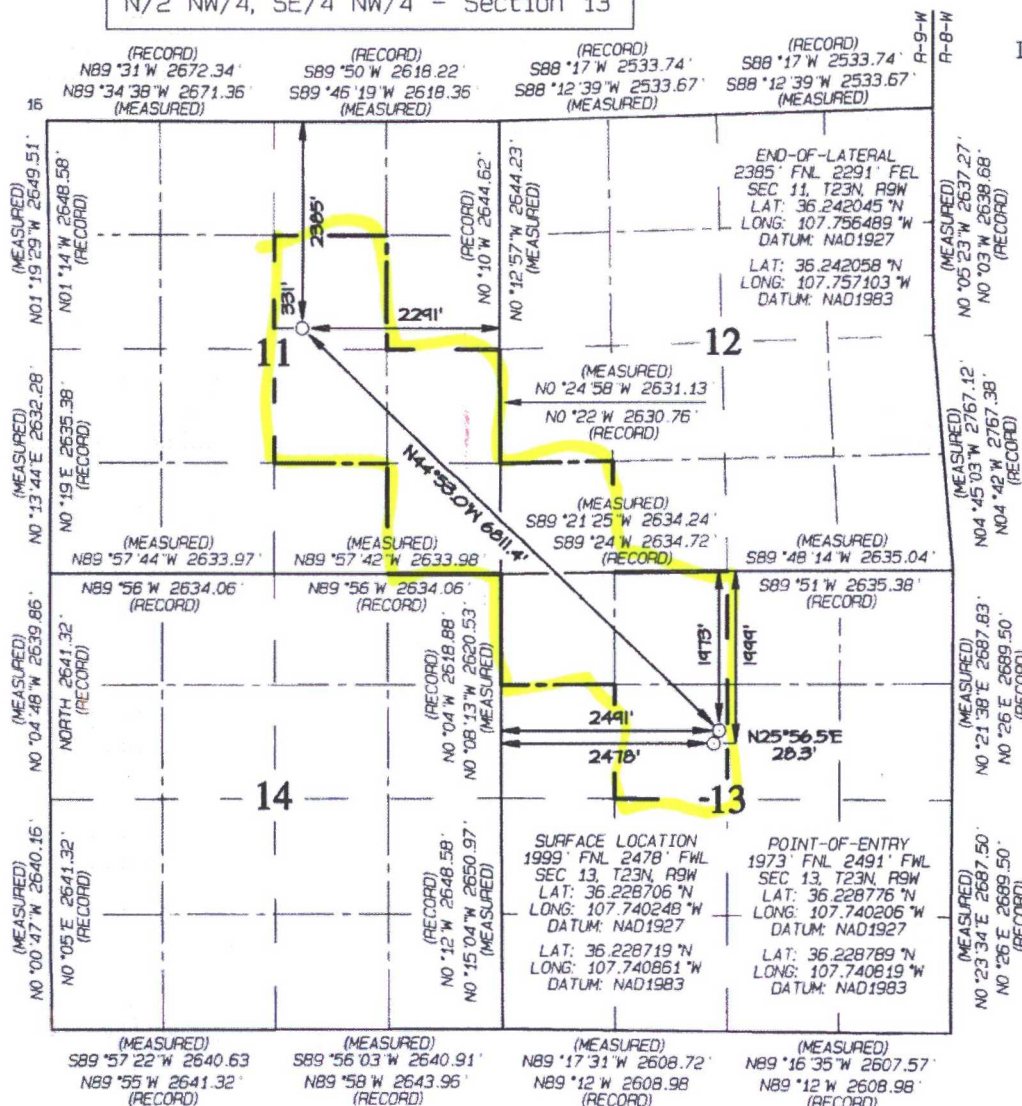
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	13	23N	9W		1999	NORTH	2478	WEST	SAN JUAN

11 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
G	11	23N	9W		2385	NORTH	2291	EAST	SAN JUAN

12 Dedicated Acres 320.0		13 Joint or Infill		14 Consolidation Code		15 Order No. R-14051 - 12,807.24 Acres	
SW/4 NE/4, N/2 SE/4		SE/4 SE/4 - Section 11		SW/4 SW/4 - Section 12		N/2 NW/4, SE/4 NW/4 - Section 13	

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



17 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.

6/16/16
Signature
Lacey Granillo
Date
lacey.granillo@wpenergy.com
Printed Name
E-mail Address

18 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 Revised: MAY 9, 2016
Survey Date: OCTOBER 23, 2015
Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269



WPX Energy

Operations Plan

OIL CONS. DIV DIST. 3
FEB 08 2017

(Note: This procedure will be adjusted onsite based upon actual conditions)

Date: June 16, 2016
Well Name: W Lybrook Unit #712H
SH Location: SENW Sec 13-23N-09W
BH Location: SWNE Sec 11-23N-09W

Field: Lybrook Mancos W
Surface:
Elevation: 6700' GR
Minerals:

Measured Depth: 12,086.08'

I. GEOLOGY

Surface formation - NACIMIENTO

A. FORMATION TOPS: (KB)

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	452	452	POINT LOOKOUT	3592	3519
KIRTLAND	614	614	MANCOS	3774	3694
PICTURED CLIFFS	1182	1182	GALLUP	4123	4033
LEWIS	1266	1266	KICKOFF POINT	4,005.99	3,917.93
CHACRA	1485	1483	TOP TARGET	5168	4763
CLIFF HOUSE	2630	2590	LANDING POINT	5,274.71	4,772.00
MENEFEE	2647	2607	BASE TARGET	5,274.71	4,772.00
			TD	12,086.08	4,780.00

B. MUD LOGGING PROGRAM:

Mudlogger on location from surface csg to TD.

C. LOGGING PROGRAM:

LWD GR from surface casing to TD.

D. NATURAL GAUGES:

Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. DRILLING

A. MUD PROGRAM:

LSND mud (WBM) will be used to drill the 12-1/4" Surface hole, the 8 3/4" Directional Vertical hole, and the curve portion of the wellbore. A LSND (WBM) or (OBM) will be used to drill the lateral portion of well. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.

B. BOP TESTING: While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The BOPE will be tested to 2,000 psi (High) for 10 minutes and the annular tested to 1,500 psi for 10 minutes. Pressure test surface casing to 1,500 psi for 30 minutes and intermediate casing to 1,500 psi for 30 minutes. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. All tests and inspections will be recorded in the tour book as to time and results.

III. MATERIALS

A. CASING PROG	OH SIZE (IN)	DEPTH (MD)	CSG SIZE	WEIGHT	GRADE	CONN
CASING TYPE	12.25"	320.00'	9.625"	36 LBS	J-55 or equiv	STC
SURFACE	8.75"	5,274.71'	7"	23 LBS	J-55 or equiv	LTC
INTERMEDIATE	6.125"	5124.71' - 12,086.08'	4.5"	11.6 LBS	P-110 or equiv	LTC
PRODUCTION	6.125"	Surf. - 5124.71'	4.5"	11.6 LBS	P-110 or equiv	LTC
TIE BACK						

B. FLOAT EQUIPM 1. SURFACE CASING:

9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.

2. INTERMEDIATE CASING:

7" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install (1) centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) centralizer at 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. If losses are encountered during the drilling of the intermediate section a DV tool will be utilized and a 2 stage cement job may be planned to ensure cement circ back to surface. The DV tool will be placed 100' above the top of the Chacra formation. If cement is circulated back to surface on the first stage, a cancelation device will be dropped to shift the dv tool closed and the 2nd stage cement job will be aborted at that time, if no cement is seen at surface on the 1st stage the stage tool will be opened and a 2nd stage cement job will be pumped.

3. PRODUCTION LINER:

Run 4-1/2" Liner with cement nose guide Float Shoe + 2jts. of 4-1/2" casing + Landing Collar + 4-1/2" pup joint + 1 RSI (Sliding Sleeve) positioned inside the 330ft Hard line. Centralizer program will be determined by Wellbore condition and when Lateral is evaluated by Geoscientists and Reservoir Engineers. Set seals on Liner Hanger. Test TOL to 1500 psi for 15 minutes.

(Note: Volumes may be adjusted onsite due to actual conditions)

C. CEMENT:

1. Surface:

5 bbl Fresh Water Spacer, 100 sx (160 cu.ft.) of 14.5 ppg Type I-II (Neat G) + 20% Fly Ash cement w/ 7.41 gal/sack mix water ratio @ 1.61 cu ft/sx yield. Calculated @ volume + 50% excess. WOC 12 hours. Test csg to 600psi. Total Volume: (160 cu-ft/100 sx/ Bbls).TOC at Surface.

2. Intermediate:

Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 96 bbls, 275 sks, (542 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 59 bbls, 254 sks, (331 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 208 bbl Drilling mud or water. Total Cement: 155 bbls, 529 sks, (872 cuft)

3. Prod Liner:

Spacer #1: 10 bbl (56 cu-ft) Water Spacer. Spacer #2: 40 bbl 9.5 ppg (224.6 cu-ft) Toned Spacer III. Spacer #3: 10 bbl Water Spacer. Lead Cement: Extencem™ System. Yield 1.36 cuft/sk 13.3 ppg (682 sx /927 cuft /165 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/-161bbl Fr Water. Total Cement (682 sx /927bbls).

D. COMPLETION: Run CCL for perforating

A. PRESSURE TEST:

1. Pressure test 4-1/2" casing to 4500 psi max, hold at 1500 psi for 30 minutes. Increase pressure to Open RSI sleeves.

B. STIMULATION:

1. Stimulate with approximately 2,805,000# 20/40 mesh sand and 340,000# 16/30 mesh sand in 619,113 gallons water with 42,696 mscf N2 for 17 stages.
2. Isolate stages with flow through frac plug.
3. Drill out frac plugs and flowback lateral.

C. RUNNING TUBING:

1. Production Tubing: Run 2-7/8", 6.5#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing near Top of Liner.

If this horizontal well is drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 B(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable rules, including 19.15.16.14 A(3) NMAC, 19.15.16.14 B(2) NMAC, 19.15.16.15 B(2) NMAC, and 19.15.16.15 B(4)

NOTES:

A 4-1/2" 11.6# P-110 Liner will be run to TD and landed +/- 150 ft. into the 7" 23# J-55 Intermediate casing with a Liner Hanger and pack-off assembly then cemented to top of liner hanger.

After cementing and TOL clean up operations are complete, the TOL will be tested to 1500 psi (per BLM).

WPX Energy

T23N R9W

2309-13F WLU

W Lybrook UT #712H - Slot A4

Wellbore #1

OIL CONS. DIV DIST. 3

FEB 06 2017

Plan: Design #1 4May16 sam

Standard Planning Report

04 May, 2016

WPX Planning Report

Database:	COMPASS	Local Co-ordinate Reference:	Well W Lybrook UT #712H (A4) - Slot A4
Company:	WPX Energy	TVD Reference:	GL @ 6700.00usft (Original Well Elev)
Project:	T23N R9W	MD Reference:	GL @ 6700.00usft (Original Well Elev)
Site:	2309-13F WLU	North Reference:	True
Well:	W Lybrook UT #712H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 4May16 sam		

Project	T23N R9W		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		

Site	2309-13F WLU				
Site Position:		Northing:	1,902,559.83 usft	Latitude:	36.228860
From:	Map	Easting:	527,432.82 usft	Longitude:	-107.740321
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.05 °

Well	W Lybrook UT #712H - Slot A4					
Well Position	+N/-S	-56.06 usft	Northing:	1,902,503.79 usft	Latitude:	36.228706
	+E/-W	21.54 usft	Easting:	527,454.41 usft	Longitude:	-107.740248
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,700.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/25/2016	9.31	62.92	49,867

Design	Design #1 4May16 sam			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (bearing)
	0.00	0.00	0.00	315.40

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,762.93	15.26	133.30	1,753.95	-69.27	73.49	2.00	2.00	0.00	133.30	
4,005.99	15.26	133.30	3,917.93	-474.15	503.08	0.00	0.00	0.00	0.00	
4,842.12	60.00	315.17	4,636.71	-261.33	297.46	9.00	5.35	-21.30	-178.33	Start 60 tan #712H
4,942.12	60.00	315.17	4,686.71	-199.91	236.41	0.00	0.00	0.00	0.00	End 60 tan #712H
5,111.52	75.25	315.17	4,751.01	-89.14	126.30	9.00	9.00	0.00	0.00	
5,274.71	89.93	315.17	4,772.00	25.32	12.52	9.00	9.00	0.00	0.00	POE #712H
12,086.08	89.93	315.17	4,780.00	4,856.15	-4,789.33	0.00	0.00	0.00	0.00	BHL #712H

WPX
Planning Report

Database: COMPASS
Company: WPX Energy
Project: T23N R9W
Site: 2309-13F WLU
Well: W Lybrook UT #712H
Wellbore: Wellbore #1
Design: Design #1 4May16 sam

Local Co-ordinate Reference: Well W Lybrook UT #712H (A4) - Slot A4
TVD Reference: GL @ 6700.00usft (Original Well Elev)
MD Reference: GL @ 6700.00usft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
320.00	0.00	0.00	320.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,500.00	10.00	133.30	1,497.47	-29.85	31.67	-43.49	2.00	2.00	0.00
1,762.93	15.26	133.30	1,753.95	-69.27	73.49	-100.92	2.00	2.00	0.00
Hold 15.26 Inclination									
2,000.00	15.26	133.30	1,982.66	-112.06	118.90	-163.27	0.00	0.00	0.00
2,500.00	15.26	133.30	2,465.03	-202.31	214.65	-294.77	0.00	0.00	0.00
3,000.00	15.26	133.30	2,947.40	-292.57	310.41	-426.27	0.00	0.00	0.00
3,500.00	15.26	133.30	3,429.78	-382.82	406.17	-557.77	0.00	0.00	0.00
4,000.00	15.26	133.30	3,912.15	-473.07	501.93	-689.27	0.00	0.00	0.00
4,005.99	15.26	133.30	3,917.93	-474.15	503.08	-690.85	0.00	0.00	0.00
Start Build DLS 9.00 TFO -178.33									
4,500.00	29.21	315.70	4,396.06	-430.23	464.23	-632.30	9.00	2.82	-35.95
4,842.12	60.00	315.17	4,636.71	-261.33	297.46	-394.94	9.00	9.00	-0.16
Hold 60.00 Inclination									
4,942.12	60.00	315.17	4,686.71	-199.91	236.41	-308.34	0.00	0.00	0.00
Start Build DLS 9.00 TFO 0.00									
5,000.00	65.21	315.17	4,713.33	-163.47	200.19	-256.96	9.00	9.00	0.00
5,111.52	75.25	315.17	4,751.01	-89.14	126.30	-152.15	9.00	9.00	0.00
Start DLS 9.00 TFO 0.00									
5,274.71	89.93	315.17	4,772.00	25.32	12.52	9.23	9.00	9.00	0.00
POE at 89.93 Inc 315.17 Deg									
5,275.00	89.93	315.17	4,772.00	25.52	12.32	9.52	0.00	0.00	0.00
7"									
5,500.00	89.93	315.17	4,772.26	185.10	-146.30	234.52	0.00	0.00	0.00
6,000.00	89.93	315.17	4,772.85	539.72	-498.79	734.52	0.00	0.00	0.00
6,500.00	89.93	315.17	4,773.44	894.33	-851.28	1,234.51	0.00	0.00	0.00
7,000.00	89.93	315.17	4,774.03	1,248.95	-1,203.76	1,734.51	0.00	0.00	0.00
7,500.00	89.93	315.17	4,774.61	1,603.56	-1,556.25	2,234.50	0.00	0.00	0.00
8,000.00	89.93	315.17	4,775.20	1,958.18	-1,908.74	2,734.50	0.00	0.00	0.00
8,500.00	89.93	315.17	4,775.79	2,312.79	-2,261.23	3,234.49	0.00	0.00	0.00
9,000.00	89.93	315.17	4,776.38	2,667.41	-2,613.71	3,734.49	0.00	0.00	0.00
9,500.00	89.93	315.17	4,776.96	3,022.02	-2,966.20	4,234.49	0.00	0.00	0.00
10,000.00	89.93	315.17	4,777.55	3,376.64	-3,318.69	4,734.48	0.00	0.00	0.00
10,500.00	89.93	315.17	4,778.14	3,731.25	-3,671.18	5,234.48	0.00	0.00	0.00
11,000.00	89.93	315.17	4,778.72	4,085.87	-4,023.67	5,734.47	0.00	0.00	0.00
11,500.00	89.93	315.17	4,779.31	4,440.48	-4,376.15	6,234.47	0.00	0.00	0.00
12,000.00	89.93	315.17	4,779.90	4,795.10	-4,728.64	6,734.47	0.00	0.00	0.00
12,086.08	89.93	315.17	4,780.00	4,856.15	-4,789.33	6,820.55	0.00	0.00	0.00
TD at 12086.08									

WPX Planning Report

Database:	COMPASS	Local Co-ordinate Reference:	Well W Lybrook UT #712H (A4) - Slot A4
Company:	WPX Energy	TVD Reference:	GL @ 6700.00usft (Original Well Elev)
Project:	T23N R9W	MD Reference:	GL @ 6700.00usft (Original Well Elev)
Site:	2309-13F WLU	North Reference:	True
Well:	W Lybrook UT #712H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 4May16 sam		

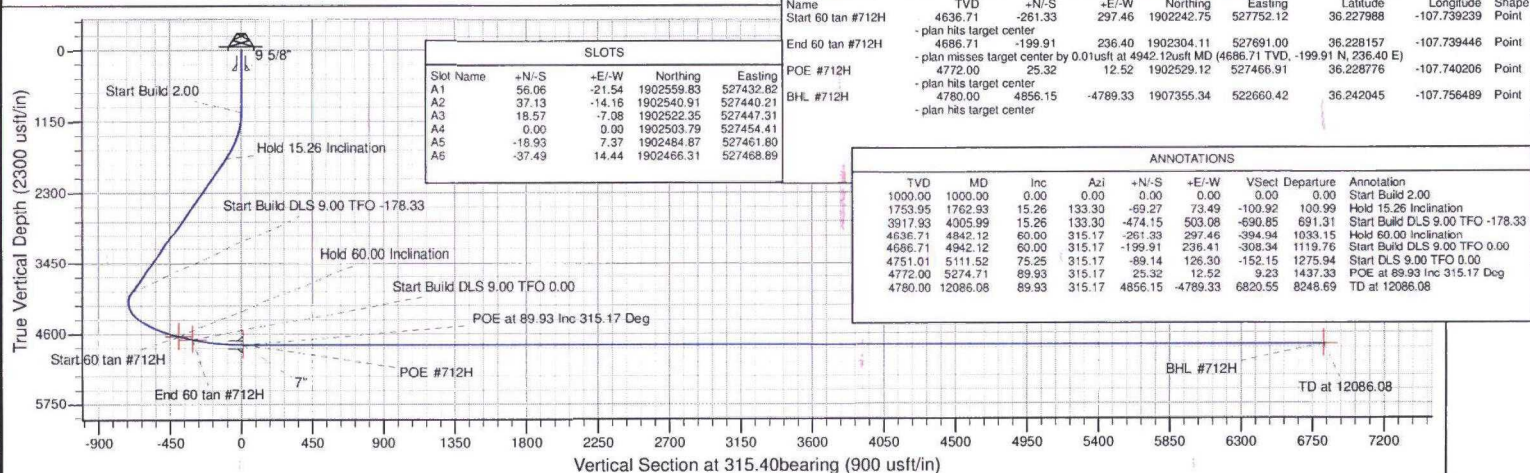
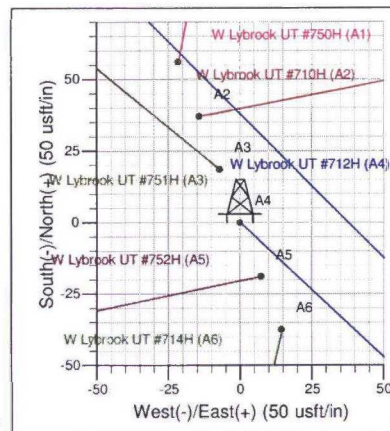
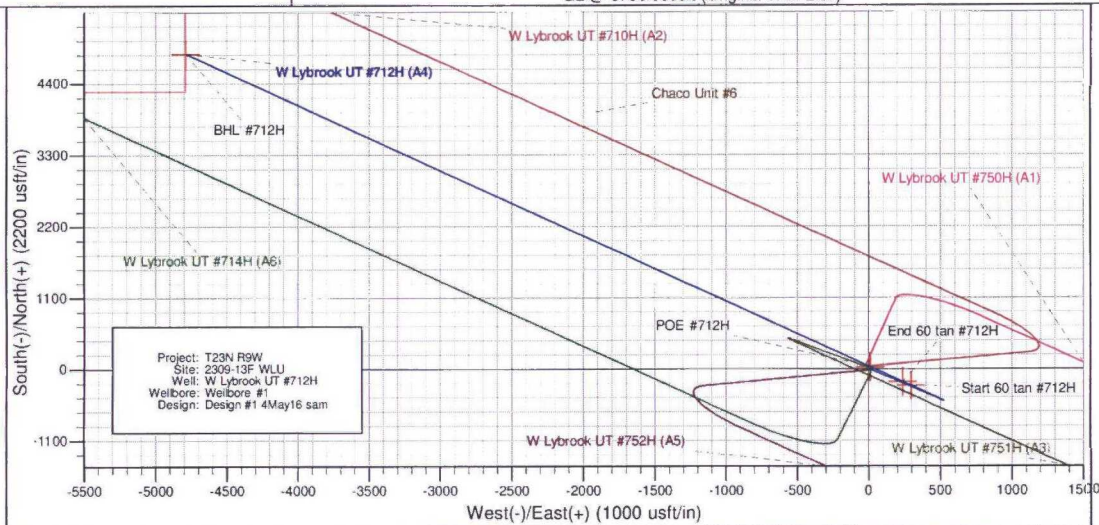
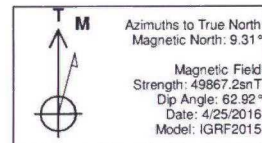
Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Start 60 tan #712H - plan hits target center - Point	0.00	0.00	4,636.71	-261.33	297.46	1,902,242.75	527,752.12	36.227988	-107.739240
End 60 tan #712H - plan misses target center by 0.01usft at 4942.12usft MD (4686.71 TVD, -199.91 N, 236.40 E) - Point	0.00	0.00	4,686.71	-199.91	236.40	1,902,304.11	527,691.00	36.228157	-107.739447
POE #712H - plan hits target center - Point	0.00	0.00	4,772.00	25.32	12.52	1,902,529.12	527,466.91	36.228776	-107.740206
BHL #712H - plan hits target center - Point	0.00	0.00	4,780.00	4,856.15	-4,789.33	1,907,355.34	522,660.42	36.242046	-107.756489

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
320.00	320.00	9 5/8"	9.625	12.250	
5,275.00	4,772.00	7"	7.000	8.750	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00	
1,762.93	1,753.95	-69.27	73.49	Hold 15.26 Inclination	
4,005.99	3,917.93	-474.15	503.08	Start Build DLS 9.00 TFO -178.33	
4,842.12	4,636.71	-261.33	297.46	Hold 60.00 Inclination	
4,942.12	4,686.71	-199.91	236.41	Start Build DLS 9.00 TFO 0.00	
5,111.52	4,751.01	-89.14	126.30	Start DLS 9.00 TFO 0.00	
5,274.71	4,772.00	25.32	12.52	POE at 89.93 Inc 315.17 Deg	
12,086.08	4,780.00	4,856.15	-4,789.33	TD at 12086.08	



Well Name: W Lybrook UT #712H
Surface Location: 2309-13F WLU
NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003
Ground Elevation: 6700.00
+N/-S 0.00 +E/-W 0.00 Northing 1902503.79 Easting 527454.41 Latitude 36.228706 Longitude -107.740248 Slot A4
GL @ 6700.00usft (Original Well Elev)



SLOTS				
Slot Name	+N/-S	+E/-W	Northing	Easting
A1	56.06	-21.54	1902559.83	527432.82
A2	37.13	-14.16	1902540.91	527440.21
A3	18.57	-7.08	1902522.35	527447.31
A4	0.00	0.00	1902503.79	527454.41
A5	-18.93	7.37	1902484.87	527461.80
A6	-37.49	14.44	1902466.31	527468.89

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Start 60 tan #712H	4636.71	-261.33	297.46	1902242.75	527752.12	36.227988	-107.739239
End 60 tan #712H	4686.71	-199.91	236.40	1902304.11	527691.00	36.228157	-107.739446
POE #712H	4772.00	25.32	12.52	1902529.12	527466.91	36.228776	-107.740206
BHL #712H	4780.00	4856.15	-4789.33	1907355.34	522660.42	36.242045	-107.756489

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
1000.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00	
1753.95	1762.93	15.26	133.30	-59.27	73.49	-100.92	100.99	Hold 15.26 Inclination	
3917.93	4005.99	15.26	133.30	-474.15	503.08	-690.85	691.31	Start Build DLS 9.00 TFO -178.33	
4636.71	4842.12	60.00	315.17	-261.33	297.46	-394.94	1033.15	Hold 60.00 Inclination	
4686.71	4942.12	60.00	315.17	-199.91	236.41	-308.34	1119.76	Start Build DLS 9.00 TFO 0.00	
4751.01	5111.52	75.25	315.17	-89.14	126.30	-152.15	1275.94	Start DLS 9.00 TFO 0.00	
4772.00	5274.71	89.93	315.17	25.32	12.52	9.23	1437.33	POE at 89.93 Inc 315.17 Deg	
4780.00	12086.08	89.93	315.17	4856.15	-4789.33	6820.55	8248.69	TD at 12086.08	

- An existing pond in the southeast quarter of the southwest quarter of Section 13, Township 23 North, Range 09 West is proposed to be cleaned out. Excavated material would be used as fill material on the proposed new road construction. To access the pond, an existing two-track road would be utilized.
- Noise stipulations would be applied due to proximity of nearby residence.

- 5 All project activities will be confined to permitted areas only.
- 6 Construction equipment may include chain saws, a brush hog, scraper, maintainer, excavator, and a dozer.
- 7 If drilling has not been initiated on the wellpads within 120 days of the wellpads being constructed, the operator will consult with the BLM to address a site-stabilization plan.

D. Production Facilities

- 1 Production facilities for the W Lybrook UT Nos. 710H, 712H, 714H, 716H, 718H, 719H, 750H, 751H, 752H, 753H, 754H, and 755H oil and natural gas wells will be located on the W Lybrook UT Nos. 716H, 718H, 719H, 753H, 754H, and 755H wellpad. Facilities will be located on the north-northeastern corner of the wellpad within an irregular shaped 270-foot by 105-foot facility area (see Figure 8, Appendix B) to allow for maximum interim reclamation and revegetation of the two wellpads.
- 2 As practical, access road on the wellpads will be a teardrop-shape through the area so that the center may be revegetated.
- 3 Within 90 days of installation, production facilities would be painted.
 - The production facilities associated with the W Lybrook UT Nos. 710H, 712H, 714H, 750H, 751H, and 752H oil and natural gas wells project will be painted Covert Green to blend with the natural color of the landscape surrounding the wellpad and would be located in efforts to the extent practical, to reasonably minimize visual impact.
 - The production facilities associated with the W Lybrook UT Nos. 716H, 718H, 719H, 753H, 754H, and 755H oil and natural gas wells project will be painted Juniper Green to blend with the natural color of the landscape surrounding the wellpad and would be located in efforts to the extent practical, to reasonably minimize visual impact.
- 4 Berms will be constructed around all storage facilities sufficient in size to contain the storage capacity of tanks. Berm walls will be compacted with appropriate equipment to assure containment.

After the completion phases and pipeline installation, portions of the project area not needed for operation will be reclaimed. When the wells are plugged, final reclamation will occur within the remainder of the project area. Reclamation is described in detail in the Surface Use Reclamation Plan (Appendix A).

7. METHODS FOR HANDLING WASTE



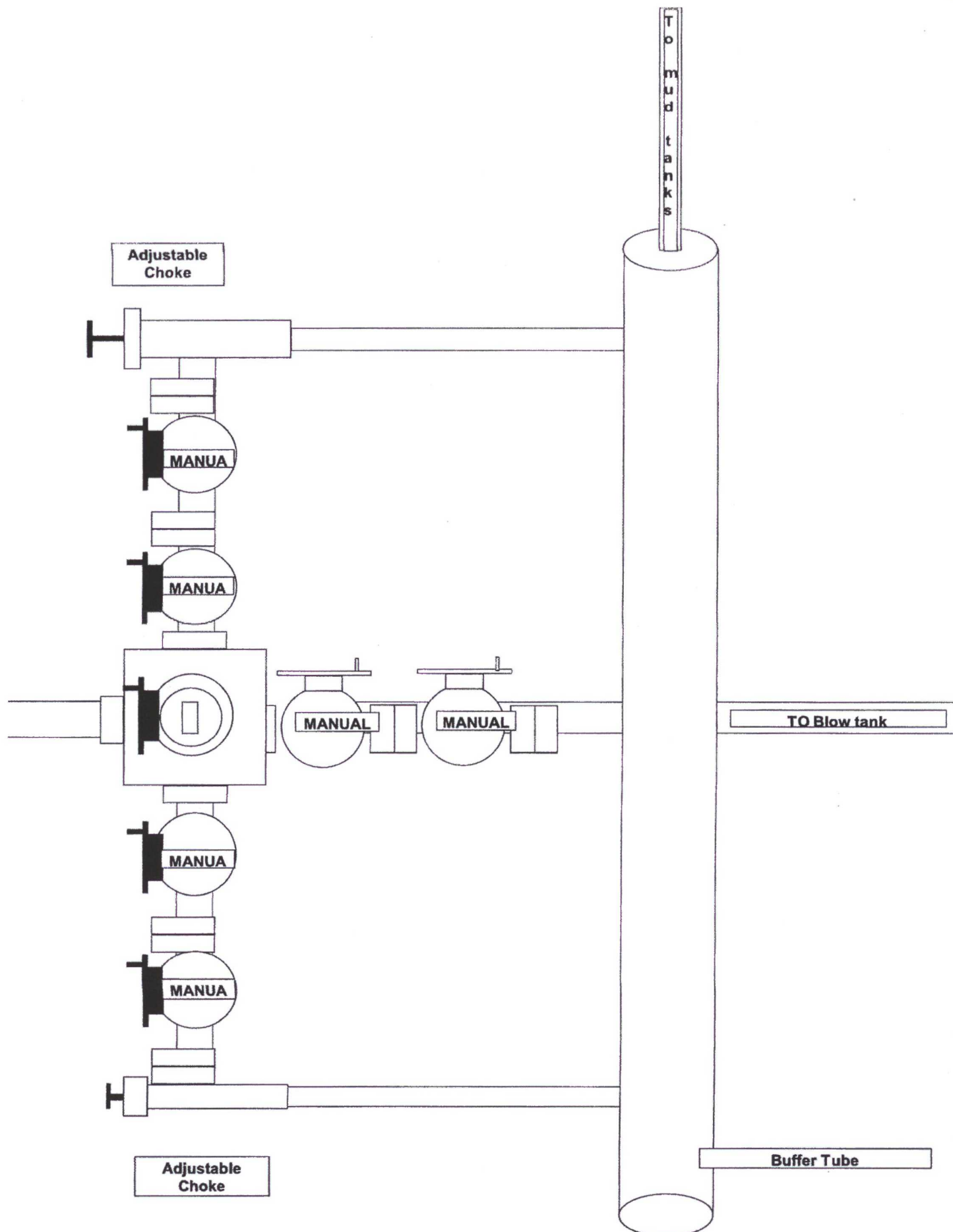
A. Cuttings

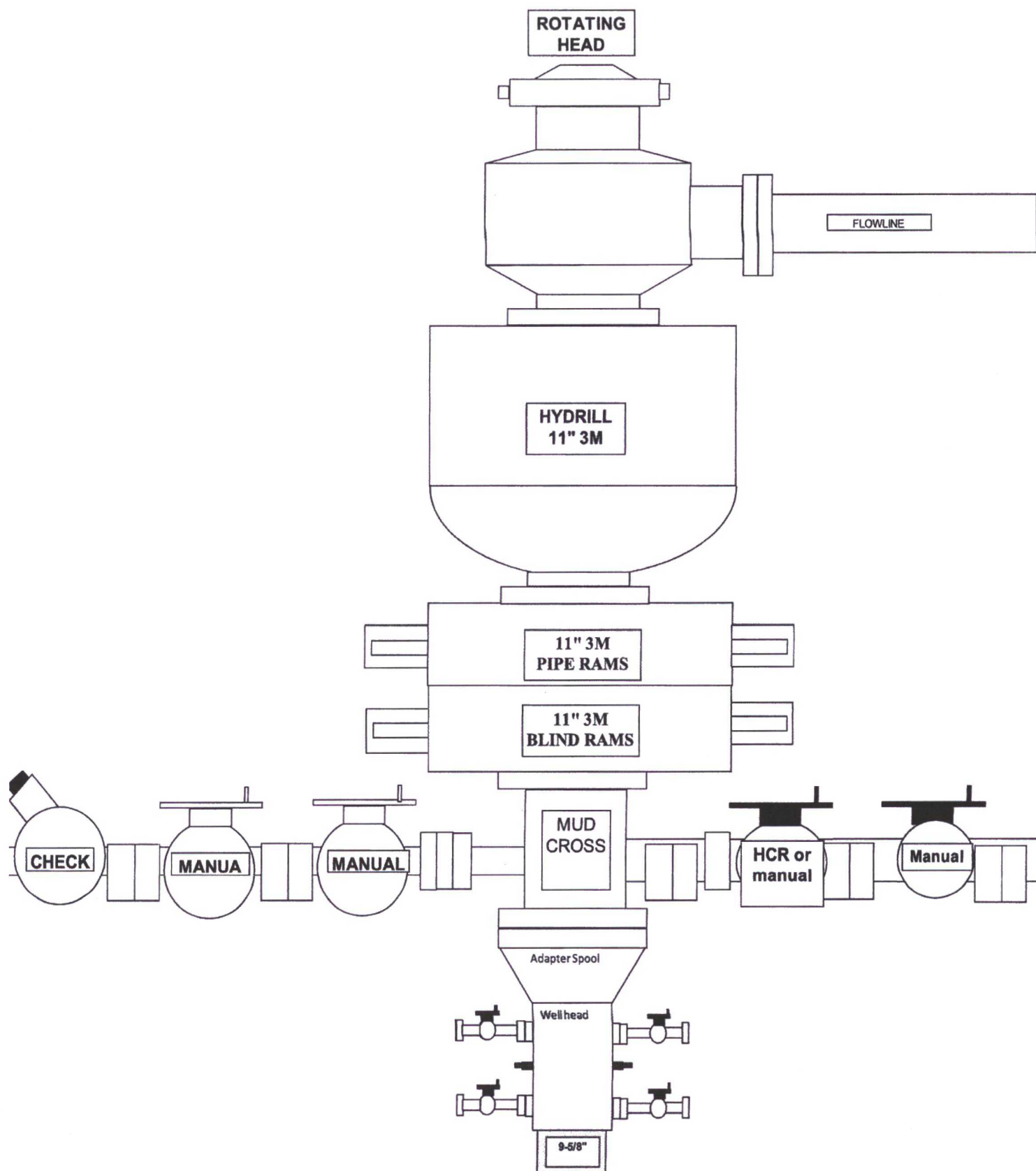
- 1 Drilling operations will utilize a closed-loop system. Drilling of the horizontal laterals will be accomplished with water-based mud. All cuttings will be placed in roll-off bins and hauled to a commercial disposal facility or land farm. WPX will follow Onshore Oil and Gas Order No. 1 regarding the placement, operation, and removal of closed-loop systems. No blow pit will be used.
- 2 Closed-loop tanks will be adequately sized for containment of all fluids.

B. Drilling Fluids

- 1 Drilling fluids will be stored onsite in above-ground storage tanks. Upon termination of drilling operations, the drilling fluids will be recycled and transferred to other permitted closed-loop systems or returned to the vendor for reuse, as practical. All residual fluids will be hauled to a commercial disposal facility.

C. Spills





Directions from the Intersection of US Hwy 550 & US Hwy 64
in Bloomfield, NM to WPX Energy Production, LLC W Lybrook Unit #712H
1999' FNL & 2478' FWL, Section 13, T23N, R9W, N.M.P.M., San Juan County, NM

Latitude: 36.228719°N Longitude: 107.740861°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 37.8 miles to Mile Marker 113.4;

Go Right (South-westerly) on County Road #7890 for 0.8 miles to fork in roadway;

Go Left (Southerly) remaining on County Road #7890 for 1.3 miles to begin access on right-hand side of roadway;

Go Right (North-westerly) continuing for 5799.2' to staked WPX W Lybrook Unit #712H location.