

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: 10/17/2017

Well information:

Operator WPX, Well Name and Number S. Escalada Unit 3654

API# 30-043-21316, Section 21, Township 22 N/S, Range 6 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.

*Charles Kern*

NMOCD Approved by Signature

7-20-2018  
Date

1220 South St. Francis Drive • Santa Fe, New Mexico 87505  
Phone (505) 476-3441 • Fax (505) 476-3462 • www.emnrd.state.nm.us/ocd

*APD held for  
unit approval  
- all agencies*

JAN 19 2018

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

|                                                                                                                                                                                                                                                                 |  |                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------|
| 1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER                                                                                                                                                                    |  | 5. Lease Serial No.<br>NMNM119281                                          |
| 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 checked="" type="checkbox"/> Multiple Zone                                          |  | 6. If Indian, Allottee or Tribe Name                                       |
| 2. Name of Operator<br>WPX ENERGY LLC                                                                                                                                                                                                                           |  | 7. If Unit or CA Agreement, Name and No.                                   |
| 3a. Address<br>720 S Main Aztec NM 87410                                                                                                                                                                                                                        |  | 8. Lease Name and Well No.<br>S ESCAVADA UNIT 365H                         |
| 3b. Phone No. (include area code)<br>(505)333-1822                                                                                                                                                                                                              |  | 9. API Well No.<br>30-043-21316                                            |
| 4. Location of Well (Report location clearly and in accordance with any State requirements.)*<br>At surface NWSW / 2529 FSL / 160 FWL / LAT 36.123367 / LONG -107.482586<br>At proposed prod. zone NWSW / 2312 FSL / 755 FWL / LAT 36.137741 / LONG -107.497993 |  | 10. Field and Pool, or Exploratory<br>MANCOS / RUSTY GALLUP OIL POOL       |
| 14. Distance in miles and direction from nearest town or post office*<br>53.9 miles                                                                                                                                                                             |  | 11. Sec., T. R. M. or Blk. and Survey or Area<br>SEC 21 / T22N / R6W / NMP |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)<br>20 feet                                                                                                                                |  | 12. County or Parish<br>SANDOVAL                                           |
| 16. No. of acres in lease<br>640                                                                                                                                                                                                                                |  | 13. State<br>NM                                                            |
| 17. Spacing Unit dedicated to this well<br>280                                                                                                                                                                                                                  |  |                                                                            |
| 18. Distance from proposed location* to nearest well, drilling, completed, 160 feet applied for, on this lease, ft.                                                                                                                                             |  | 20. BLM/BIA Bond No. on file<br>FED: UTB000178                             |
| 19. Proposed Depth<br>5264 feet / 11498 feet                                                                                                                                                                                                                    |  |                                                                            |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br>7126 feet                                                                                                                                                                                                |  | 22. Approximate date work will start*<br>04/01/2018                        |
|                                                                                                                                                                                                                                                                 |  | 23. Estimated duration<br>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:

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

|                                                    |                                                                 |                    |
|----------------------------------------------------|-----------------------------------------------------------------|--------------------|
| 25. Signature<br>(Electronic Submission)           | Name (Printed/Typed)<br>Lacey Granillo / Ph: (505)333-1816      | Date<br>10/17/2017 |
| Title<br>Permitting Tech III                       |                                                                 |                    |
| Approved by (Signature)<br>(Electronic Submission) | Name (Printed/Typed)<br>Kristopher S. Ellis / Ph: (505)564-7734 | Date<br>01/16/2018 |
| Title<br>LIE<br>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)

**APPROVED**  
Approval Date: 01/16/2018

N

NMAD

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                             |                                                         |                                     |
|-----------------------------|---------------------------------------------------------|-------------------------------------|
| *API Number<br>30.043.21316 | *Pool Code<br>52860                                     | *Pool Name<br>RUSTY GALLUP OIL POOL |
| *Property Code<br>322151    | *Property Name<br>S ESCAVADA UNIT                       | *Well Number<br>365H                |
| *GRID No<br>120782 (372286) | *Operator Name<br>WPX ENERGY PRODUCTION, LLC (Enduring) | *Elevation<br>7126'                 |

10 Surface Location

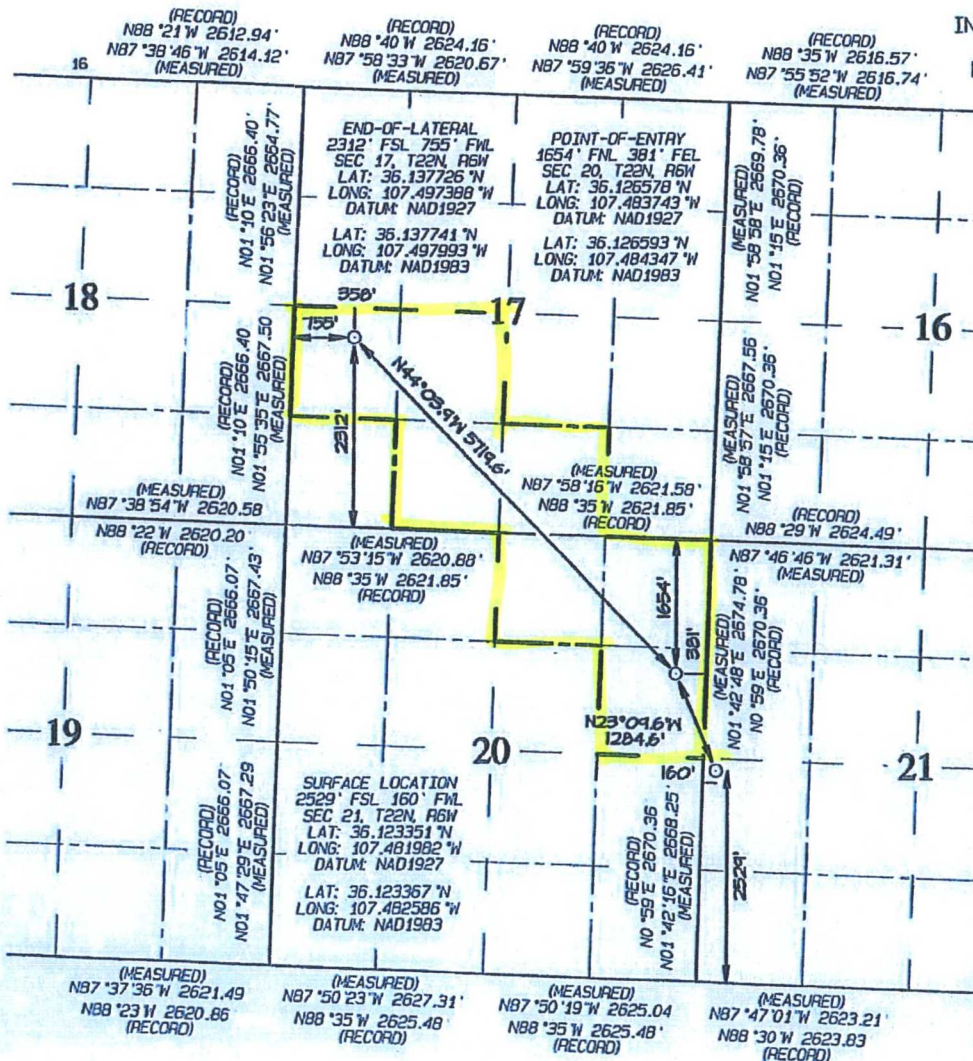
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| L             | 21      | 22N      | 6W    |         | 2529          | SOUTH            | 160           | WEST           | SANDOVAL |

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   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| L             | 17      | 22N      | 6W    |         | 2312          | SOUTH            | 755           | WEST           | SANDOVAL |

|                              |                                                                                   |                    |                       |                         |
|------------------------------|-----------------------------------------------------------------------------------|--------------------|-----------------------|-------------------------|
| 12 Dedicated Acres<br>280.00 | N/2 SW/4, SE/4 SW/4<br>SW/4 SE/4 - Section 17<br>N/2 NE/4, SE/4 NE/4 - Section 20 | 13 Joint or Infill | 14 Consolidation Code | 15 Order No.<br>R-14347 |
|------------------------------|-----------------------------------------------------------------------------------|--------------------|-----------------------|-------------------------|

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.

Signature  
Lacey Granillo  
Printed Name  
lacey.granillo@wpxenergy.com  
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: OCTOBER 6, 2017  
Date of Survey: MARCH 1, 2017

Signature and Seal of Professional Surveyor



JASON C. EDWARDS  
Certificate Number 15269

Navajo Surface



## **WPX Energy**

### **Operations Plan**

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

**Date:** October 5, 2017

**Well Name:** S Escavada UT #365H

**SH Location:** NWSW Sec 21 22N-06W

**BH Location:** NWSW Sec 17 22N-06W

**Field:** Rusty Gallup Oil Pool

**Surface:** BLM

**Elevation:** 7,126'

**Minerals:** IA

**Measured Depth:** 11,498'

## **I. GEOLOGY**

Surface formation - NACIMIENTO

### **A. FORMATION TOPS: (KB)**

| NAME           | MD    | TVD   | NAME          | MD     | TVD   |
|----------------|-------|-------|---------------|--------|-------|
| Ojo Alamo      | 1,128 | 1,124 | Mancos        | 4,144  | 4,108 |
| Kirtland       | 1,298 | 1,292 | Gallup        | 4,541  | 4,501 |
| Picture Cliffs | 1,698 | 1,688 |               |        |       |
| Lewis          | 1,843 | 1,832 | KICKOFF POINT | 4,699  | 4,657 |
| Chacra         | 2,103 | 2,089 | LANDING POINT | 5,628  | 5,224 |
| Cliff House    | 3,201 | 3,175 | TOP TARGET    | 5,224  | 5,628 |
| Menefee        | 3,241 | 3,215 |               |        |       |
| Point Lookout  | 4,048 | 4,013 | TD            | 11,498 | 5,264 |

### **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 PROGRAM:**

| CASING TYPE  | OH SIZE (IN) | DEPTH (MD)     | CSG SIZE | WEIGHT   | GRADE          | CONN |
|--------------|--------------|----------------|----------|----------|----------------|------|
| SURFACE      | 12.25"       | 320'           | 9.625"   | 36 LBS   | J-55 or equiv  | STC  |
| INTERMEDIATE | 8.75"        | 5628'          | 7"       | 23 LBS   | J-55 or equiv  | LTC  |
| PRODUCTION   | 6.125"       | 5478' - 11498' | 4.5"     | 11.6 LBS | P-110 or equiv | LTC  |
| TIE BACK     | 6.125"       | Surf. - 5478'  | 4.5"     | 11.6 LBS | P-110 or equiv | LTC  |

### **B. FLOAT EQUIPMENT:**

#### **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 cancellation 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.

## **C. CEMENT:**

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

#### **1. Surface:**

5 bbl Fresh Water Spacer, 28.0 bbls, 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/ 28.0 Bbls). TOC at Surface.

2. Intermediate:

Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 138 bbls, 397 sks, (774 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 102 bbls, 440 sks, (572 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 222 bbl Drilling mud or water.  
Total Cement: 240 bbls, 837 sks, (1346 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 (560 sk / 762 cuft / 136 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/- 130 bbl Fr Water.  
Total Cement: 136 bbls, 560 sks, (762 cuft)

**D. COMPLETION:**

Run CCL for perforating

A. PRESSURE TEST:

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

B. STIMULATION:

1. Stimulate with approximately 1,000#/ft 20/40 mesh sand and +/- 200' stage interval for full lateral length of the well with water and N2. 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) NMAC.

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**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**

Sandoval County, NM 3003 West

S Escavada UT 364 Pad

S Escavada UT 365H

API:

Wellbore #1

Plan: Plan #1

## **Standard Planning Report**

21 September, 2017

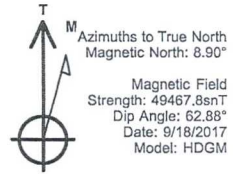


[www.scientificdrilling.com](http://www.scientificdrilling.com)



GL 7126 + KB 21 = @ 7147.00usft (Cyclone 32)

**S Escavada UT 365H**  
**Sandoval County, NM 3003 West**  
**Northing: 1864327.98**  
**Easting: 603765.88**  
**Plan #1**

**WELL DETAILS** S Escavada UT 365H

Ground Level: 7126.00

| +N/-S | +E/-W | Northing   | Easting   | Latitude  | Longitude   |
|-------|-------|------------|-----------|-----------|-------------|
| 0.00  | 0.00  | 1864327.98 | 603765.88 | 36.123351 | -107.481982 |

**SECTION DETAILS**

| MD       | Inc   | Azi    | TVD     | +N/-S   | +E/-W    | Dleg | TFace  | Vsect   | Target   |
|----------|-------|--------|---------|---------|----------|------|--------|---------|----------|
| 0.00     | 0.00  | 0.00   | 0.00    | 0.00    | 0.00     | 0.00 | 0.00   | 0.00    |          |
| 500.00   | 0.00  | 0.00   | 500.00  | 0.00    | 0.00     | 0.00 | 0.00   | 0.00    |          |
| 918.55   | 8.37  | 358.90 | 917.06  | 30.52   | -0.58    | 2.00 | 358.90 | 22.07   |          |
| 4699.05  | 8.37  | 358.90 | 4657.29 | 580.79  | -11.12   | 0.00 | 0.00   | 420.02  |          |
| 5627.60  | 89.61 | 315.21 | 5224.00 | 1067.31 | -413.51  | 9.00 | -44.04 | 1048.79 |          |
| 11497.69 | 89.61 | 315.21 | 5264.00 | 5233.01 | -4549.13 | 0.00 | 0.00   | 6918.74 | 365H BHL |

**SITE DETAILS:** S Escavada UT 364 Pad **PROJECT DETAILS:** Sandoval County, NM 3003 West

Site Centre Northing: 1864315.18  
Easting: 603750.86

Positional Uncertainty: 0.00  
Convergence: 0.21  
Local North: True

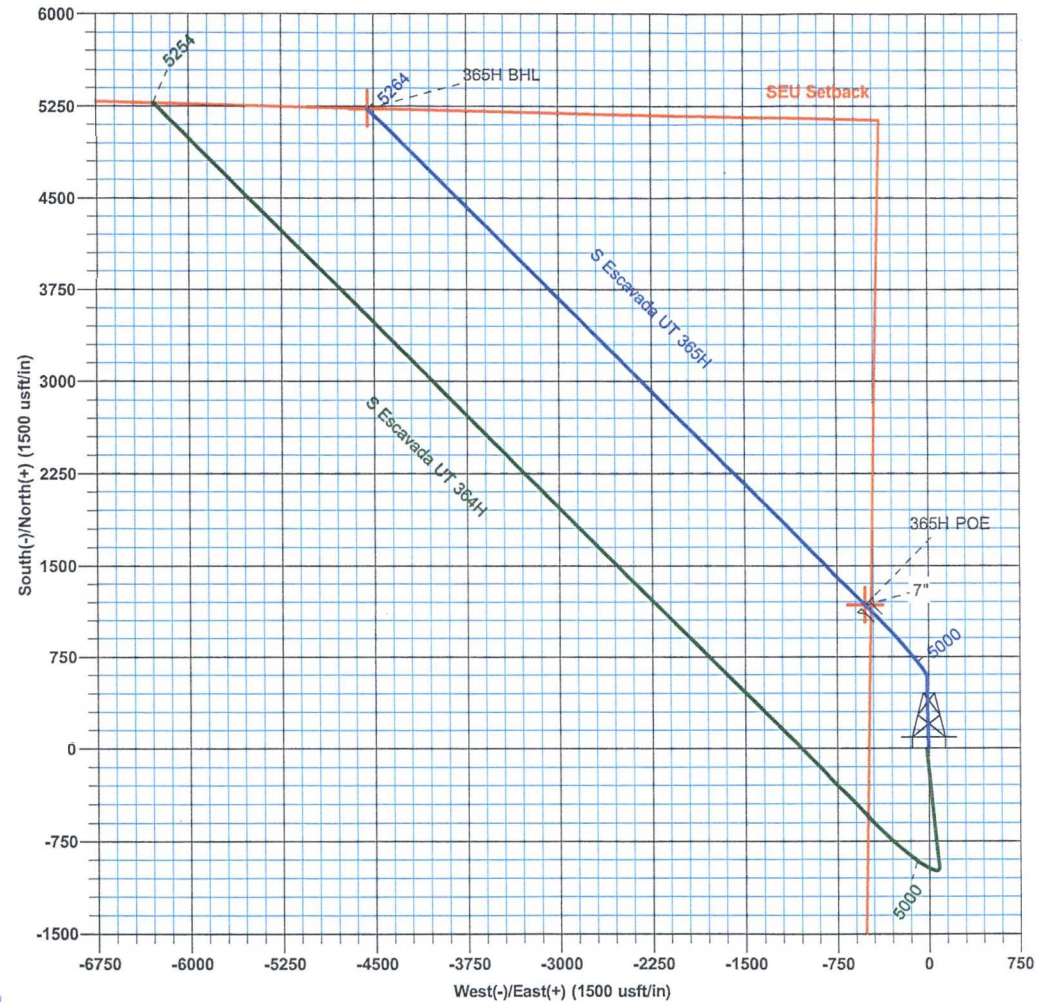
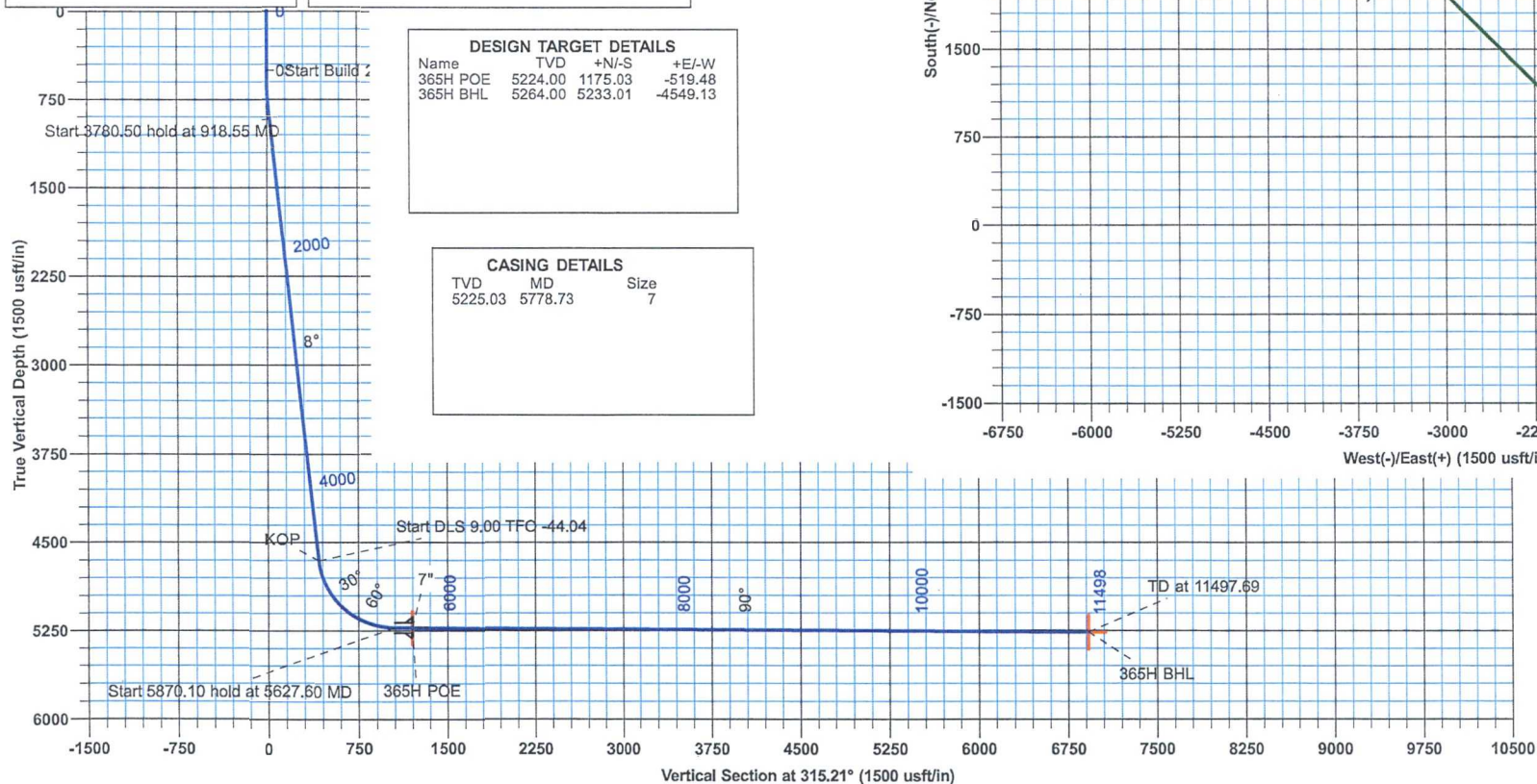
Geodetic System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: New Mexico West 3003  
System Datum: Mean Sea Level

**DESIGN TARGET DETAILS**

| Name     | TVD     | +N/-S   | +E/-W    |
|----------|---------|---------|----------|
| 365H POE | 5224.00 | 1175.03 | -519.48  |
| 365H BHL | 5264.00 | 5233.01 | -4549.13 |

**CASING DETAILS**

| TVD     | MD      | Size |
|---------|---------|------|
| 5225.03 | 5778.73 | 7    |



# Scientific Drilling Int.

## Planning Report

|                  |                               |                                     |                                              |
|------------------|-------------------------------|-------------------------------------|----------------------------------------------|
| <b>Database:</b> | Grand Junction District       | <b>Local Co-ordinate Reference:</b> | Well S Escavada UT 365H                      |
| <b>Company:</b>  | WPX Energy                    | <b>TVD Reference:</b>               | GL 7126 + KB 21 = @ 7147.00usft (Cyclone 32) |
| <b>Project:</b>  | Sandoval County, NM 3003 West | <b>MD Reference:</b>                | GL 7126 + KB 21 = @ 7147.00usft (Cyclone 32) |
| <b>Site:</b>     | S Escavada UT 364 Pad         | <b>North Reference:</b>             | True                                         |
| <b>Well:</b>     | S Escavada UT 365H            | <b>Survey Calculation Method:</b>   | Minimum Curvature                            |
| <b>Wellbore:</b> | Wellbore #1                   |                                     |                                              |
| <b>Design:</b>   | Plan #1                       |                                     |                                              |

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project</b>     | Sandoval County, NM 3003 West        |                      |                |
| <b>Map System:</b> | US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)              |                      |                |
| <b>Map Zone:</b>   | New Mexico West 3003                 |                      |                |

|                              |                       |                     |                   |                          |             |
|------------------------------|-----------------------|---------------------|-------------------|--------------------------|-------------|
| <b>Site</b>                  | S Escavada UT 364 Pad |                     |                   |                          |             |
| <b>Site Position:</b>        |                       | <b>Northing:</b>    | 1,864,315.18 usft | <b>Latitude:</b>         | 36.123316   |
| <b>From:</b>                 | Lat/Long              | <b>Easting:</b>     | 603,750.87 usft   | <b>Longitude:</b>        | -107.482033 |
| <b>Position Uncertainty:</b> | 0.00 usft             | <b>Slot Radius:</b> | 13-3/16 "         | <b>Grid Convergence:</b> | 0.21 °      |

|                             |                    |            |                            |                   |                                    |
|-----------------------------|--------------------|------------|----------------------------|-------------------|------------------------------------|
| <b>Well</b>                 | S Escavada UT 365H |            |                            |                   |                                    |
| <b>Well Position</b>        | +N/-S              | 12.74 usft | <b>Northing:</b>           | 1,864,327.98 usft | <b>Latitude:</b> 36.123351         |
|                             | +E/-W              | 15.06 usft | <b>Easting:</b>            | 603,765.88 usft   | <b>Longitude:</b> -107.481982      |
| <b>Position Uncertainty</b> | 0.00 usft          |            | <b>Wellhead Elevation:</b> | 0.00 usft         | <b>Ground Level:</b> 7,126.00 usft |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Wellbore #1       |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | HDGM              | 9/18/2017          | 8.90                   | 62.88                | 49,468                     |

|                          |                                |                     |                     |                      |      |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| <b>Design</b>            | Plan #1                        |                     |                     |                      |      |
| <b>Audit Notes:</b>      |                                |                     |                     |                      |      |
| <b>Version:</b>          |                                | <b>Phase:</b>       | PLAN                | <b>Tie On Depth:</b> | 0.00 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Direction (°)</b> |      |
|                          | 0.00                           | 0.00                | 0.00                | 315.21               |      |

| <b>Plan Sections</b>  |                 |             |                       |              |              |                         |                        |                       |         |          |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|----------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | 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    |          |
| 500.00                | 0.00            | 0.00        | 500.00                | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |          |
| 918.55                | 8.37            | 358.90      | 917.06                | 30.52        | -0.58        | 2.00                    | 2.00                   | 0.00                  | 358.90  |          |
| 4,699.05              | 8.37            | 358.90      | 4,657.29              | 580.79       | -11.12       | 0.00                    | 0.00                   | 0.00                  | 0.00    |          |
| 5,627.60              | 89.61           | 315.21      | 5,224.00              | 1,067.31     | -413.51      | 9.00                    | 8.75                   | -4.71                 | -44.04  |          |
| 11,497.70             | 89.61           | 315.21      | 5,264.00              | 5,233.01     | -4,549.13    | 0.00                    | 0.00                   | 0.00                  | 0.00    | 365H BHL |

**Scientific Drilling Int.**  
Planning Report

|           |                               |                              |                                              |
|-----------|-------------------------------|------------------------------|----------------------------------------------|
| Database: | Grand Junction District       | Local Co-ordinate Reference: | Well S Escavada UT 365H                      |
| Company:  | WPX Energy                    | TVD Reference:               | GL 7126 ÷ KB 21 = @ 7147.00usft (Cyclone 32) |
| Project:  | Sandoval County, NM 3003 West | MD Reference:                | GL 7126 ÷ KB 21 = @ 7147.00usft (Cyclone 32) |
| Site:     | S Escavada UT 364 Pad         | North Reference:             | True                                         |
| Well:     | S Escavada UT 365H            | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1                   |                              |                                              |
| Design:   | Plan #1                       |                              |                                              |

| Planned Survey                         |                 |             |                       |              |              |                         |                         |                        |                       |
|----------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                  | Inclination (°) | Azimuth (°) | 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                  |
| 100.00                                 | 0.00            | 0.00        | 100.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 200.00                                 | 0.00            | 0.00        | 200.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 300.00                                 | 0.00            | 0.00        | 300.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 400.00                                 | 0.00            | 0.00        | 400.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 500.00                                 | 0.00            | 0.00        | 500.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Start Build 2.00</b>                |                 |             |                       |              |              |                         |                         |                        |                       |
| 600.00                                 | 2.00            | 358.90      | 599.98                | 1.74         | -0.03        | 1.26                    | 2.00                    | 2.00                   | 0.00                  |
| 700.00                                 | 4.00            | 358.90      | 699.84                | 6.98         | -0.13        | 5.05                    | 2.00                    | 2.00                   | 0.00                  |
| 800.00                                 | 6.00            | 358.90      | 799.45                | 15.69        | -0.30        | 11.35                   | 2.00                    | 2.00                   | 0.00                  |
| 900.00                                 | 8.00            | 358.90      | 898.70                | 27.87        | -0.53        | 20.16                   | 2.00                    | 2.00                   | 0.00                  |
| 918.55                                 | 8.37            | 358.90      | 917.06                | 30.52        | -0.58        | 22.07                   | 2.00                    | 2.00                   | 0.00                  |
| <b>Start 3780.50 hold at 918.55 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,000.00                               | 8.37            | 358.90      | 997.64                | 42.37        | -0.81        | 30.64                   | 0.00                    | 0.00                   | 0.00                  |
| 1,100.00                               | 8.37            | 358.90      | 1,096.58              | 56.93        | -1.09        | 41.17                   | 0.00                    | 0.00                   | 0.00                  |
| 1,127.72                               | 8.37            | 358.90      | 1,124.00              | 60.96        | -1.17        | 44.09                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Ojo Alamo</b>                       |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,200.00                               | 8.37            | 358.90      | 1,195.51              | 71.48        | -1.37        | 51.69                   | 0.00                    | 0.00                   | 0.00                  |
| 1,297.52                               | 8.37            | 358.90      | 1,292.00              | 85.68        | -1.64        | 61.96                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Kirtland</b>                        |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,300.00                               | 8.37            | 358.90      | 1,294.45              | 86.04        | -1.65        | 62.22                   | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00                               | 8.37            | 358.90      | 1,393.38              | 100.59       | -1.93        | 72.75                   | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00                               | 8.37            | 358.90      | 1,492.32              | 115.15       | -2.21        | 83.27                   | 0.00                    | 0.00                   | 0.00                  |
| 1,600.00                               | 8.37            | 358.90      | 1,591.25              | 129.70       | -2.48        | 93.80                   | 0.00                    | 0.00                   | 0.00                  |
| 1,697.79                               | 8.37            | 358.90      | 1,688.00              | 143.94       | -2.76        | 104.09                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Picture Cliffs</b>                  |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,700.00                               | 8.37            | 358.90      | 1,690.19              | 144.26       | -2.76        | 104.33                  | 0.00                    | 0.00                   | 0.00                  |
| 1,800.00                               | 8.37            | 358.90      | 1,789.12              | 158.81       | -3.04        | 114.85                  | 0.00                    | 0.00                   | 0.00                  |
| 1,843.34                               | 8.37            | 358.90      | 1,832.00              | 165.12       | -3.16        | 119.41                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Lewis</b>                           |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,900.00                               | 8.37            | 358.90      | 1,888.06              | 173.37       | -3.32        | 125.38                  | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00                               | 8.37            | 358.90      | 1,986.99              | 187.93       | -3.60        | 135.91                  | 0.00                    | 0.00                   | 0.00                  |
| 2,100.00                               | 8.37            | 358.90      | 2,085.93              | 202.48       | -3.88        | 146.43                  | 0.00                    | 0.00                   | 0.00                  |
| 2,103.11                               | 8.37            | 358.90      | 2,089.00              | 202.93       | -3.89        | 146.76                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Chacra</b>                          |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,200.00                               | 8.37            | 358.90      | 2,184.86              | 217.04       | -4.16        | 156.96                  | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00                               | 8.37            | 358.90      | 2,283.79              | 231.59       | -4.43        | 167.48                  | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00                               | 8.37            | 358.90      | 2,382.73              | 246.15       | -4.71        | 178.01                  | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00                               | 8.37            | 358.90      | 2,481.66              | 260.70       | -4.99        | 188.54                  | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00                               | 8.37            | 358.90      | 2,580.60              | 275.26       | -5.27        | 199.06                  | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00                               | 8.37            | 358.90      | 2,679.53              | 289.81       | -5.55        | 209.59                  | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00                               | 8.37            | 358.90      | 2,778.47              | 304.37       | -5.83        | 220.12                  | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00                               | 8.37            | 358.90      | 2,877.40              | 318.93       | -6.11        | 230.64                  | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00                               | 8.37            | 358.90      | 2,976.34              | 333.48       | -6.39        | 241.17                  | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00                               | 8.37            | 358.90      | 3,075.27              | 348.04       | -6.66        | 251.69                  | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00                               | 8.37            | 358.90      | 3,174.21              | 362.59       | -6.94        | 262.22                  | 0.00                    | 0.00                   | 0.00                  |
| 3,200.80                               | 8.37            | 358.90      | 3,175.00              | 362.71       | -6.95        | 262.31                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Cliff House</b>                     |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,241.23                               | 8.37            | 358.90      | 3,215.00              | 368.59       | -7.06        | 266.56                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Menefee</b>                         |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,300.00                               | 8.37            | 358.90      | 3,273.14              | 377.15       | -7.22        | 272.75                  | 0.00                    | 0.00                   | 0.00                  |

# Scientific Drilling Int.

## Planning Report

|           |                               |                              |                                              |
|-----------|-------------------------------|------------------------------|----------------------------------------------|
| Database: | Grand Junction District       | Local Co-ordinate Reference: | Well S Escavada UT 365H                      |
| Company:  | WPX Energy                    | TVD Reference:               | GL 7126 + KB 21 = @ 7147.00usft (Cyclone 32) |
| Project:  | Sandoval County, NM 3003 West | MD Reference:                | GL 7126 + KB 21 = @ 7147.00usft (Cyclone 32) |
| Site:     | S Escavada UT 364 Pad         | North Reference:             | True                                         |
| Well:     | S Escavada UT 365H            | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1                   |                              |                                              |
| Design:   | Plan #1                       |                              |                                              |

| Planned Survey                  |                 |             |                       |              |              |                         |                         |                        |                       |  |
|---------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft)           | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 3,400.00                        | 8.37            | 358.90      | 3,372.08              | 391.70       | -7.50        | 283.27                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,500.00                        | 8.37            | 358.90      | 3,471.01              | 406.26       | -7.78        | 293.80                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,600.00                        | 8.37            | 358.90      | 3,569.95              | 420.81       | -8.06        | 304.33                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,700.00                        | 8.37            | 358.90      | 3,668.88              | 435.37       | -8.34        | 314.85                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,800.00                        | 8.37            | 358.90      | 3,767.81              | 449.92       | -8.62        | 325.38                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,900.00                        | 8.37            | 358.90      | 3,866.75              | 464.48       | -8.89        | 335.91                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,000.00                        | 8.37            | 358.90      | 3,965.68              | 479.04       | -9.17        | 346.43                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,047.83                        | 8.37            | 358.90      | 4,013.00              | 486.00       | -9.31        | 351.47                  | 0.00                    | 0.00                   | 0.00                  |  |
| Point Lookout                   |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 4,100.00                        | 8.37            | 358.90      | 4,064.62              | 493.59       | -9.45        | 356.96                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,143.85                        | 8.37            | 358.90      | 4,108.00              | 499.97       | -9.57        | 361.57                  | 0.00                    | 0.00                   | 0.00                  |  |
| Mancos                          |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 4,200.00                        | 8.37            | 358.90      | 4,163.55              | 508.15       | -9.73        | 367.48                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,300.00                        | 8.37            | 358.90      | 4,262.49              | 522.70       | -10.01       | 378.01                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,400.00                        | 8.37            | 358.90      | 4,361.42              | 537.26       | -10.29       | 388.54                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,500.00                        | 8.37            | 358.90      | 4,460.36              | 551.81       | -10.57       | 399.06                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,541.08                        | 8.37            | 358.90      | 4,501.00              | 557.79       | -10.68       | 403.39                  | 0.00                    | 0.00                   | 0.00                  |  |
| Gallup                          |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 4,600.00                        | 8.37            | 358.90      | 4,559.29              | 566.37       | -10.85       | 409.59                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,699.05                        | 8.37            | 358.90      | 4,657.29              | 580.79       | -11.12       | 420.02                  | 0.00                    | 0.00                   | 0.00                  |  |
| Start DLS 9.00 TFO -44.04 - KOP |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 4,743.43                        | 11.58           | 344.94      | 4,701.00              | 588.32       | -12.34       | 426.22                  | 9.00                    | 7.23                   | -31.46                |  |
| Gallup Upper                    |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 4,750.00                        | 12.09           | 343.52      | 4,707.43              | 589.62       | -12.71       | 427.40                  | 9.00                    | 7.83                   | -21.67                |  |
| 4,800.00                        | 16.18           | 335.70      | 4,755.91              | 600.99       | -17.06       | 438.54                  | 9.00                    | 8.17                   | -15.64                |  |
| 4,850.00                        | 20.43           | 331.01      | 4,803.37              | 614.98       | -24.16       | 453.47                  | 9.00                    | 8.51                   | -9.37                 |  |
| 4,900.00                        | 24.77           | 327.90      | 4,849.52              | 631.50       | -33.96       | 472.10                  | 9.00                    | 8.68                   | -6.22                 |  |
| 4,950.00                        | 29.16           | 325.67      | 4,894.07              | 650.44       | -46.40       | 494.31                  | 9.00                    | 8.77                   | -4.46                 |  |
| 5,000.00                        | 33.57           | 323.98      | 4,936.76              | 671.69       | -61.41       | 519.96                  | 9.00                    | 8.83                   | -3.38                 |  |
| 5,050.00                        | 38.00           | 322.65      | 4,977.31              | 695.12       | -78.89       | 548.90                  | 9.00                    | 8.86                   | -2.67                 |  |
| 5,092.62                        | 41.79           | 321.70      | 5,010.00              | 716.71       | -95.65       | 576.03                  | 9.00                    | 8.89                   | -2.22                 |  |
| Mancos Lwr                      |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 5,100.00                        | 42.45           | 321.55      | 5,015.47              | 720.59       | -98.73       | 580.95                  | 9.00                    | 8.90                   | -2.03                 |  |
| 5,119.97                        | 44.23           | 321.17      | 5,030.00              | 731.29       | -107.29      | 594.58                  | 9.00                    | 8.90                   | -1.93                 |  |
| El Vado                         |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 5,150.00                        | 46.90           | 320.63      | 5,051.02              | 747.93       | -120.81      | 615.91                  | 9.00                    | 8.91                   | -1.79                 |  |
| 5,200.00                        | 51.36           | 319.83      | 5,083.73              | 776.98       | -144.99      | 653.57                  | 9.00                    | 8.92                   | -1.60                 |  |
| 5,243.99                        | 55.29           | 319.21      | 5,110.00              | 803.81       | -167.90      | 688.74                  | 9.00                    | 8.93                   | -1.42                 |  |
| Mancos Unc                      |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 5,250.00                        | 55.82           | 319.13      | 5,113.40              | 807.55       | -171.14      | 693.68                  | 9.00                    | 8.93                   | -1.34                 |  |
| 5,284.50                        | 58.91           | 318.69      | 5,132.00              | 829.45       | -190.23      | 722.67                  | 9.00                    | 8.93                   | -1.29                 |  |
| Frac Barrier                    |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 5,300.00                        | 60.29           | 318.50      | 5,139.84              | 839.47       | -199.08      | 736.02                  | 9.00                    | 8.94                   | -1.22                 |  |
| 5,350.00                        | 64.76           | 317.92      | 5,162.90              | 872.53       | -228.64      | 780.31                  | 9.00                    | 8.94                   | -1.16                 |  |
| 5,400.00                        | 69.24           | 317.38      | 5,182.44              | 906.54       | -259.64      | 826.28                  | 9.00                    | 8.95                   | -1.08                 |  |
| 5,438.52                        | 72.68           | 316.99      | 5,195.00              | 933.24       | -284.38      | 862.66                  | 9.00                    | 8.95                   | -1.02                 |  |
| PS 3                            |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 5,450.00                        | 73.71           | 316.87      | 5,198.32              | 941.27       | -291.89      | 873.65                  | 9.00                    | 8.95                   | -0.99                 |  |
| 5,500.00                        | 78.19           | 316.39      | 5,210.46              | 976.52       | -325.19      | 922.13                  | 9.00                    | 8.95                   | -0.97                 |  |
| 5,550.00                        | 82.66           | 315.92      | 5,218.77              | 1,012.06     | -359.34      | 971.41                  | 9.00                    | 8.95                   | -0.94                 |  |
| 5,551.79                        | 82.82           | 315.90      | 5,219.00              | 1,013.34     | -360.57      | 973.19                  | 9.00                    | 8.95                   | -0.93                 |  |

# Scientific Drilling Int.

## Planning Report

|           |                               |                              |                                              |
|-----------|-------------------------------|------------------------------|----------------------------------------------|
| Database: | Grand Junction District       | Local Co-ordinate Reference: | Well S Escavada UT 365H                      |
| Company:  | WPX Energy                    | TVD Reference:               | GL 7126 + KB 21 = @ 7147.00usft (Cyclone 32) |
| Project:  | Sandoval County, NM 3003 West | MD Reference:                | GL 7126 + KB 21 = @ 7147.00usft (Cyclone 32) |
| Site:     | S Escavada UT 364 Pad         | North Reference:             | True                                         |
| Well:     | S Escavada UT 365H            | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1                   |                              |                                              |
| Design:   | Plan #1                       |                              |                                              |

### Planned Survey

| Measured Depth (usft)                   | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| <b>PS2</b>                              |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,600.00                                | 87.14           | 315.46      | 5,223.22              | 1,047.69     | -394.12      | 1,021.20                | 9.00                    | 8.95                   | -0.92                 |
| 5,627.60                                | 89.61           | 315.21      | 5,224.00              | 1,067.31     | -413.51      | 1,048.79                | 9.00                    | 8.95                   | -0.91                 |
| <b>Start 5870.10 hold at 5627.60 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,700.00                                | 89.61           | 315.21      | 5,224.49              | 1,118.69     | -464.52      | 1,121.18                | 0.00                    | 0.00                   | 0.00                  |
| 5,778.73                                | 89.61           | 315.21      | 5,225.03              | 1,174.56     | -519.99      | 1,199.91                | 0.00                    | 0.00                   | 0.00                  |
| <b>7"</b>                               |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,800.00                                | 89.61           | 315.21      | 5,225.17              | 1,189.65     | -534.97      | 1,221.18                | 0.00                    | 0.00                   | 0.00                  |
| 5,900.00                                | 89.61           | 315.21      | 5,225.86              | 1,260.62     | -605.42      | 1,321.18                | 0.00                    | 0.00                   | 0.00                  |
| 6,000.00                                | 89.61           | 315.21      | 5,226.54              | 1,331.58     | -675.87      | 1,421.18                | 0.00                    | 0.00                   | 0.00                  |
| 6,100.00                                | 89.61           | 315.21      | 5,227.22              | 1,402.55     | -746.33      | 1,521.18                | 0.00                    | 0.00                   | 0.00                  |
| 6,200.00                                | 89.61           | 315.21      | 5,227.90              | 1,473.51     | -816.78      | 1,621.17                | 0.00                    | 0.00                   | 0.00                  |
| 6,300.00                                | 89.61           | 315.21      | 5,228.58              | 1,544.48     | -887.23      | 1,721.17                | 0.00                    | 0.00                   | 0.00                  |
| 6,400.00                                | 89.61           | 315.21      | 5,229.26              | 1,615.44     | -957.68      | 1,821.17                | 0.00                    | 0.00                   | 0.00                  |
| 6,500.00                                | 89.61           | 315.21      | 5,229.94              | 1,686.41     | -1,028.14    | 1,921.17                | 0.00                    | 0.00                   | 0.00                  |
| 6,600.00                                | 89.61           | 315.21      | 5,230.63              | 1,757.37     | -1,098.59    | 2,021.16                | 0.00                    | 0.00                   | 0.00                  |
| 6,700.00                                | 89.61           | 315.21      | 5,231.31              | 1,828.34     | -1,169.04    | 2,121.16                | 0.00                    | 0.00                   | 0.00                  |
| 6,800.00                                | 89.61           | 315.21      | 5,231.99              | 1,899.30     | -1,239.49    | 2,221.16                | 0.00                    | 0.00                   | 0.00                  |
| 6,900.00                                | 89.61           | 315.21      | 5,232.67              | 1,970.27     | -1,309.95    | 2,321.16                | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00                                | 89.61           | 315.21      | 5,233.35              | 2,041.23     | -1,380.40    | 2,421.15                | 0.00                    | 0.00                   | 0.00                  |
| 7,100.00                                | 89.61           | 315.21      | 5,234.03              | 2,112.20     | -1,450.85    | 2,521.15                | 0.00                    | 0.00                   | 0.00                  |
| 7,200.00                                | 89.61           | 315.21      | 5,234.71              | 2,183.16     | -1,521.30    | 2,621.15                | 0.00                    | 0.00                   | 0.00                  |
| 7,300.00                                | 89.61           | 315.21      | 5,235.40              | 2,254.13     | -1,591.75    | 2,721.15                | 0.00                    | 0.00                   | 0.00                  |
| 7,400.00                                | 89.61           | 315.21      | 5,236.08              | 2,325.09     | -1,662.21    | 2,821.14                | 0.00                    | 0.00                   | 0.00                  |
| 7,500.00                                | 89.61           | 315.21      | 5,236.76              | 2,396.06     | -1,732.66    | 2,921.14                | 0.00                    | 0.00                   | 0.00                  |
| 7,600.00                                | 89.61           | 315.21      | 5,237.44              | 2,467.02     | -1,803.11    | 3,021.14                | 0.00                    | 0.00                   | 0.00                  |
| 7,700.00                                | 89.61           | 315.21      | 5,238.12              | 2,537.99     | -1,873.56    | 3,121.14                | 0.00                    | 0.00                   | 0.00                  |
| 7,800.00                                | 89.61           | 315.21      | 5,238.80              | 2,608.95     | -1,944.02    | 3,221.14                | 0.00                    | 0.00                   | 0.00                  |
| 7,900.00                                | 89.61           | 315.21      | 5,239.48              | 2,679.92     | -2,014.47    | 3,321.13                | 0.00                    | 0.00                   | 0.00                  |
| 8,000.00                                | 89.61           | 315.21      | 5,240.17              | 2,750.88     | -2,084.92    | 3,421.13                | 0.00                    | 0.00                   | 0.00                  |
| 8,100.00                                | 89.61           | 315.21      | 5,240.85              | 2,821.85     | -2,155.37    | 3,521.13                | 0.00                    | 0.00                   | 0.00                  |
| 8,200.00                                | 89.61           | 315.21      | 5,241.53              | 2,892.81     | -2,225.83    | 3,621.13                | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00                                | 89.61           | 315.21      | 5,242.21              | 2,963.77     | -2,296.28    | 3,721.12                | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00                                | 89.61           | 315.21      | 5,242.89              | 3,034.74     | -2,366.73    | 3,821.12                | 0.00                    | 0.00                   | 0.00                  |
| 8,500.00                                | 89.61           | 315.21      | 5,243.57              | 3,105.70     | -2,437.18    | 3,921.12                | 0.00                    | 0.00                   | 0.00                  |
| 8,600.00                                | 89.61           | 315.21      | 5,244.25              | 3,176.67     | -2,507.63    | 4,021.12                | 0.00                    | 0.00                   | 0.00                  |
| 8,700.00                                | 89.61           | 315.21      | 5,244.94              | 3,247.63     | -2,578.09    | 4,121.11                | 0.00                    | 0.00                   | 0.00                  |
| 8,800.00                                | 89.61           | 315.21      | 5,245.62              | 3,318.60     | -2,648.54    | 4,221.11                | 0.00                    | 0.00                   | 0.00                  |
| 8,900.00                                | 89.61           | 315.21      | 5,246.30              | 3,389.56     | -2,718.99    | 4,321.11                | 0.00                    | 0.00                   | 0.00                  |
| 9,000.00                                | 89.61           | 315.21      | 5,246.98              | 3,460.53     | -2,789.44    | 4,421.11                | 0.00                    | 0.00                   | 0.00                  |
| 9,100.00                                | 89.61           | 315.21      | 5,247.66              | 3,531.49     | -2,859.90    | 4,521.11                | 0.00                    | 0.00                   | 0.00                  |
| 9,200.00                                | 89.61           | 315.21      | 5,248.34              | 3,602.46     | -2,930.35    | 4,621.10                | 0.00                    | 0.00                   | 0.00                  |
| 9,300.00                                | 89.61           | 315.21      | 5,249.02              | 3,673.42     | -3,000.80    | 4,721.10                | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00                                | 89.61           | 315.21      | 5,249.71              | 3,744.39     | -3,071.25    | 4,821.10                | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00                                | 89.61           | 315.21      | 5,250.39              | 3,815.35     | -3,141.71    | 4,921.10                | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                                | 89.61           | 315.21      | 5,251.07              | 3,886.32     | -3,212.16    | 5,021.09                | 0.00                    | 0.00                   | 0.00                  |
| 9,700.00                                | 89.61           | 315.21      | 5,251.75              | 3,957.28     | -3,282.61    | 5,121.09                | 0.00                    | 0.00                   | 0.00                  |
| 9,800.00                                | 89.61           | 315.21      | 5,252.43              | 4,028.25     | -3,353.06    | 5,221.09                | 0.00                    | 0.00                   | 0.00                  |
| 9,900.00                                | 89.61           | 315.21      | 5,253.11              | 4,099.21     | -3,423.51    | 5,321.09                | 0.00                    | 0.00                   | 0.00                  |
| 10,000.00                               | 89.61           | 315.21      | 5,253.79              | 4,170.18     | -3,493.97    | 5,421.08                | 0.00                    | 0.00                   | 0.00                  |
| 10,100.00                               | 89.61           | 315.21      | 5,254.48              | 4,241.14     | -3,564.42    | 5,521.08                | 0.00                    | 0.00                   | 0.00                  |

# Scientific Drilling Int.

## Planning Report

|                  |                               |                                     |                                              |
|------------------|-------------------------------|-------------------------------------|----------------------------------------------|
| <b>Database:</b> | Grand Junction District       | <b>Local Co-ordinate Reference:</b> | Well S Escavada UT 365H                      |
| <b>Company:</b>  | WPX Energy                    | <b>TVD Reference:</b>               | GL 7126 + KB 21 = @ 7147.00usft (Cyclone 32) |
| <b>Project:</b>  | Sandoval County, NM 3003 West | <b>MD Reference:</b>                | GL 7126 + KB 21 = @ 7147.00usft (Cyclone 32) |
| <b>Site:</b>     | S Escavada UT 364 Pad         | <b>North Reference:</b>             | True                                         |
| <b>Well:</b>     | S Escavada UT 365H            | <b>Survey Calculation Method:</b>   | Minimum Curvature                            |
| <b>Wellbore:</b> | Wellbore #1                   |                                     |                                              |
| <b>Design:</b>   | Plan #1                       |                                     |                                              |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 10,200.00             | 89.61           | 315.21      | 5,255.16              | 4,312.11     | -3,634.87    | 5,621.08                | 0.00                    | 0.00                   | 0.00                  |
| 10,300.00             | 89.61           | 315.21      | 5,255.84              | 4,383.07     | -3,705.32    | 5,721.08                | 0.00                    | 0.00                   | 0.00                  |
| 10,400.00             | 89.61           | 315.21      | 5,256.52              | 4,454.04     | -3,775.78    | 5,821.08                | 0.00                    | 0.00                   | 0.00                  |
| 10,500.00             | 89.61           | 315.21      | 5,257.20              | 4,525.00     | -3,846.23    | 5,921.07                | 0.00                    | 0.00                   | 0.00                  |
| 10,600.00             | 89.61           | 315.21      | 5,257.88              | 4,595.97     | -3,916.68    | 6,021.07                | 0.00                    | 0.00                   | 0.00                  |
| 10,700.00             | 89.61           | 315.21      | 5,258.56              | 4,666.93     | -3,987.13    | 6,121.07                | 0.00                    | 0.00                   | 0.00                  |
| 10,800.00             | 89.61           | 315.21      | 5,259.25              | 4,737.90     | -4,057.59    | 6,221.07                | 0.00                    | 0.00                   | 0.00                  |
| 10,900.00             | 89.61           | 315.21      | 5,259.93              | 4,808.86     | -4,128.04    | 6,321.06                | 0.00                    | 0.00                   | 0.00                  |
| 11,000.00             | 89.61           | 315.21      | 5,260.61              | 4,879.83     | -4,198.49    | 6,421.06                | 0.00                    | 0.00                   | 0.00                  |
| 11,100.00             | 89.61           | 315.21      | 5,261.29              | 4,950.79     | -4,268.94    | 6,521.06                | 0.00                    | 0.00                   | 0.00                  |
| 11,200.00             | 89.61           | 315.21      | 5,261.97              | 5,021.76     | -4,339.39    | 6,621.06                | 0.00                    | 0.00                   | 0.00                  |
| 11,300.00             | 89.61           | 315.21      | 5,262.65              | 5,092.72     | -4,409.85    | 6,721.05                | 0.00                    | 0.00                   | 0.00                  |
| 11,400.00             | 89.61           | 315.21      | 5,263.33              | 5,163.68     | -4,480.30    | 6,821.05                | 0.00                    | 0.00                   | 0.00                  |
| 11,497.70             | 89.61           | 315.21      | 5,264.00              | 5,233.01     | -4,549.13    | 6,918.74                | 0.00                    | 0.00                   | 0.00                  |
| TD at 11497.69        |                 |             |                       |              |              |                         |                         |                        |                       |

| Design Targets                                                                                |               |              |            |              |              |                 |                |           |             |
|-----------------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------|-------------|
| Target Name                                                                                   | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude  | Longitude   |
| - hit/miss target                                                                             |               |              |            |              |              |                 |                |           |             |
| - Shape                                                                                       |               |              |            |              |              |                 |                |           |             |
| 365H POE                                                                                      | 0.00          | 0.00         | 5,224.00   | 1,175.03     | -519.48      | 1,865,501.12    | 603,242.16     | 36.126579 | -107.483741 |
| - plan misses target center by 1.24usft at 5778.70usft MD (5225.03 TVD, 1174.54 N, -519.96 E) |               |              |            |              |              |                 |                |           |             |
| - Point                                                                                       |               |              |            |              |              |                 |                |           |             |
| 365H BHL                                                                                      | 0.00          | 0.00         | 5,264.00   | 5,233.01     | -4,549.13    | 1,869,544.51    | 599,197.87     | 36.137726 | -107.497388 |
| - plan hits target center                                                                     |               |              |            |              |              |                 |                |           |             |
| - Point                                                                                       |               |              |            |              |              |                 |                |           |             |

| Casing Points         |                       |      |                     |                   |  |  |  |  |  |
|-----------------------|-----------------------|------|---------------------|-------------------|--|--|--|--|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (") | Hole Diameter (") |  |  |  |  |  |
| 5,778.73              | 5,225.03              | 7"   | 7                   | 8-3/4             |  |  |  |  |  |

**Scientific Drilling Int.**  
Planning Report

|                  |                               |                                     |                                              |
|------------------|-------------------------------|-------------------------------------|----------------------------------------------|
| <b>Database:</b> | Grand Junction District       | <b>Local Co-ordinate Reference:</b> | Well S Escavada UT 365H                      |
| <b>Company:</b>  | WPX Energy                    | <b>TVD Reference:</b>               | GL 7126 + KB 21 = @ 7147.00usft (Cyclone 32) |
| <b>Project:</b>  | Sandoval County, NM 3003 West | <b>MD Reference:</b>                | GL 7126 + KB 21 = @ 7147.00usft (Cyclone 32) |
| <b>Site:</b>     | S Escavada UT 364 Pad         | <b>North Reference:</b>             | True                                         |
| <b>Well:</b>     | S Escavada UT 365H            | <b>Survey Calculation Method:</b>   | Minimum Curvature                            |
| <b>Wellbore:</b> | Wellbore #1                   |                                     |                                              |
| <b>Design:</b>   | Plan #1                       |                                     |                                              |

| Formations            |                       |                |           |         |                   |  |
|-----------------------|-----------------------|----------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name           | Lithology | Dip (°) | Dip Direction (°) |  |
| 1,127.72              | 1,124.00              | Ojo Alamo      |           |         |                   |  |
| 1,297.52              | 1,292.00              | Kirtland       |           |         |                   |  |
| 1,697.79              | 1,688.00              | Picture Cliffs |           |         |                   |  |
| 1,843.34              | 1,832.00              | Lewis          |           |         |                   |  |
| 2,103.11              | 2,089.00              | Chacra         |           |         |                   |  |
| 3,200.80              | 3,175.00              | Cliff House    |           |         |                   |  |
| 3,241.23              | 3,215.00              | Menefee        |           |         |                   |  |
| 4,047.83              | 4,013.00              | Point Lookout  |           |         |                   |  |
| 4,143.85              | 4,108.00              | Mancos         |           |         |                   |  |
| 4,541.08              | 4,501.00              | Gallup         |           |         |                   |  |
| 4,743.43              | 4,701.00              | Gallup Upper   |           |         |                   |  |
| 5,092.62              | 5,010.00              | Mancos Lwr     |           |         |                   |  |
| 5,119.97              | 5,030.00              | El Vado        |           |         |                   |  |
| 5,243.99              | 5,110.00              | Mancos Unc     |           |         |                   |  |
| 5,284.50              | 5,132.00              | Frac Barrier   |           |         |                   |  |
| 5,438.52              | 5,195.00              | PS 3           |           |         |                   |  |
| 5,551.79              | 5,219.00              | PS2            |           |         |                   |  |

| Plan Annotations      |                       |                   |              |                                  |
|-----------------------|-----------------------|-------------------|--------------|----------------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                          |
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                                  |
| 500.00                | 500.00                | 0.00              | 0.00         | Start Build 2.00                 |
| 918.55                | 917.06                | 30.52             | -0.58        | Start 3780.50 hold at 918.55 MD  |
| 4,699.05              | 4,657.29              | 580.79            | -11.12       | Start DLS 9.00 TFO -44.04        |
| 4,699.05              | 4,657.29              | 580.79            | -11.12       | KOP                              |
| 5,627.60              | 5,224.00              | 1,067.31          | -413.51      | Start 5870.10 hold at 5627.60 MD |
| 11,497.70             | 5,264.00              | 5,233.01          | -4,549.13    | TD at 11497.69                   |

## 4.6 Construction Material

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Construction material would consist of native material at the site locations. All features would be built with a balanced cut and fill, such that all material would be native. Topsoil would be stripped and placed as a berm along the outer edge of the pad or as a windrow along the edge of the access and/or well-connect pipeline corridor. Topsoil would be stored separately and protected for use during interim reclamation. Subsoil horizons from cuts would be used as fill material to establish a level working surface, and to construct earthen berms where necessary.

Sandstone would be used as surfacing material along the road if natural occurring binding material is not present in sufficient amounts within the existing soil and subsoil. If sandstone is needed for surfacing, the sandstone would be retrieved from a permitted location.

WPX would likely need to permit the expansion of existing rock quarry pits in the area to provide surfacing materials for construction. If a new rock quarry pit is needed and identified, WPX would pursue permitting as a separate action.

Construction and maintenance activities would cease if soil or road surfaces become saturated to the extent that construction equipment is unable to stay within the project area and/or when activities cause irreparable harm to roads, soils, or streams.

## 4.7 Waste

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### 4.7.1 Cuttings

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

### 4.7.2 Drilling Fluids

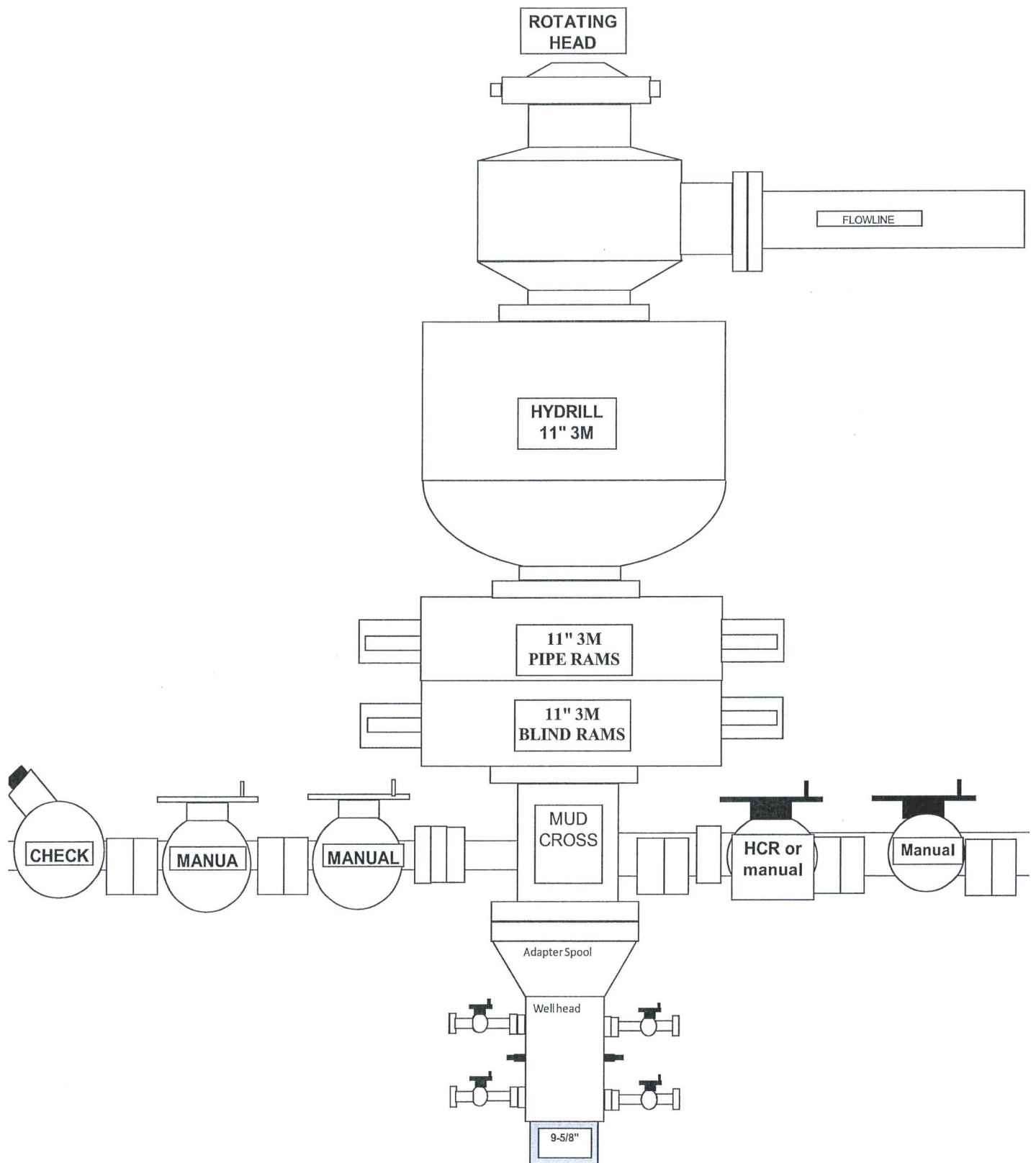
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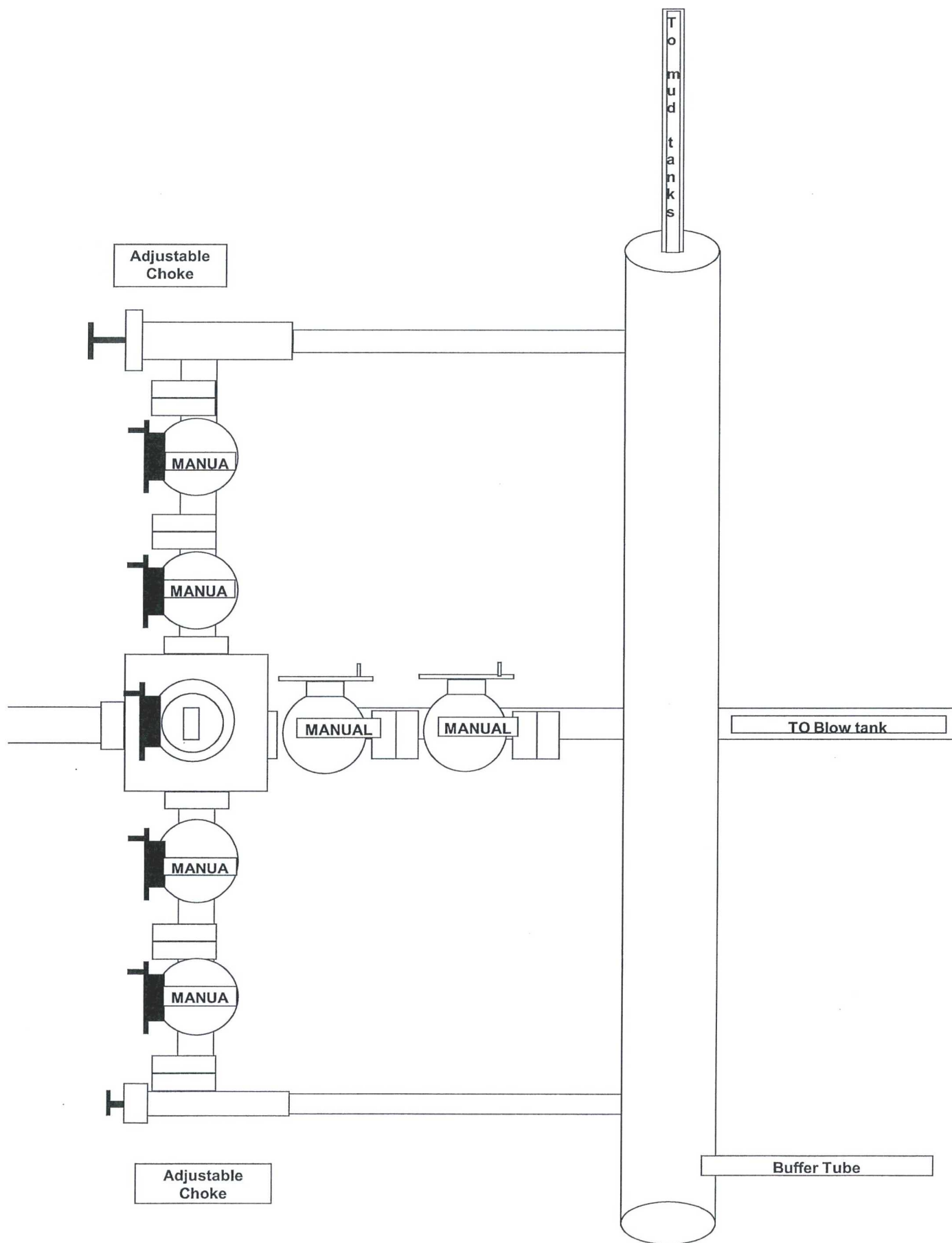
Drilling fluids would be stored onsite in above-ground storage tanks. Upon termination of drilling operations, the drilling fluids would be recycled and transferred to other permitted closed-loop systems or returned to the vendor for reuse, as practical. All residual fluids would be hauled to a commercial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

### 4.7.3 Spills

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Upon discovery of a spill of oil, gas, or any other potentially hazardous substance, actions would be implemented to stop the release source and secure the site, unless the action could result in a threat to personal or public safety. Spill notifications would be made according to applicable federal and state regulations. Appropriate measures for cleanup would be implemented, and the spill remediated in accordance with applicable federal and state regulations.





**Directions from the Intersection of US Hwy 550 & US Hwy 64**  
**in Bloomfield, NM to WPX Energy Production, LLC S Escavada Unit #365H**  
**2529' FSL & 160' FWL, Section 21, T22N, R6W, N.M.P.M., Sandoval County, NM**

**Latitude: 36.123367°N Longitude: 107.482586°W Datum: NAD1983**

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 53.6 miles to Mile Marker 97.7;

Go Right (Southerly) on Indian Service Route #46 for 3.6 miles to fork in roadway;

Go Right (Southerly) which is straight continuing on Indian Service Route #46 for 1.0 miles to fork in roadway;

Go Left (Southerly) continuing on Indian Service Route #46 for 0.2 miles to fork in roadway;

Go Right (Southerly) which is straight continuing on Indian Service Route #46 for 2.6 miles to new access on right-hand side of roadway which continues for 155.4' to staked WPX S Escavada Unit #365H location.