Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
OCD Artesia

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMNM 120757

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
PATTON MDP1 17 FEDERAL 2H

2. Name of Operator
OXY USA INCORPORATED
Contact: DAVID STEWART
E-Mail: david_stewart@oxy.com

9. API Well No.
30-015-44460-00-X1

3a. Address
5 GREENWAY PLAZA SUITE 110
HOUSTON, TX 77046-0521

3b. Phone No. (include area code)
Ph: 432.685.5717

10. Field and Pool or Exploratory Area
COTTON DRAW-BONE SPRING

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 8 T24S R31E SWSW 170FSL 906FWL
32.225060 N Lat, 103.805458 W Lon

11. County or Parish, State
EDDY COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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

OXY USA Inc. respectfully requests to plugback and redrill the curve. While running in hole with the lateral assembly, the well was inadvertently sidetracked out of the main wellbore in the curve. See attached for the cement plug design, updated directional plot and wellbore schematic.

Received verbal approval from Mustafa Hague-BLM 1/17/18.

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 05 2018
RECEIVED

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

Electronic Submission #401936 verified by the BLM Well Information System
For OXY USA INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 01/26/2018 (18PP0874SE)

Name *(Printed/Typed)* DAVID STEWART — Title REGULATORY ADVISOR

Signature (Electronic Submission) — Date 01/23/2018

APPROVED
FEB 1 2018
PETROLEUM ENGINEER
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Mustafa Hague — Title PETROLEUM ENGINEER — Date 2/1/2018

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

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

RVP 2-6-2018

PRODUCTION HOLE ABANDONMENT

Job Considerations and Planning Guidelines:

Refer to WWDC document "Cementing Best Practices" for additional information.

Stinger

- For 8 ½" hole and larger, the stinger may be increased to 3 ½".
- The stinger should be a minimum of 200-500 ft longer than the plug length.
- If plugging is an issue, or if cement is not "falling" out of the stinger, then an open-ended, angled cut sub may be used.
- Will pick up 2-7/8" (L80) tubing with a bent joint for orientation.

Diverter Sub

- A diverter sub with upward angled ports (see image below) should be used when cementing off-bottom.
  - Ensure there is enough tail pipe below diverter holes to accommodate all wiper plugs to be used in the job.
- If plugging is an issue, or if cement is not "falling" out of the stinger, then an open-ended, angled cut sub may be used.
- Pick up 2-7/8" (L80) tubing with a bull nose diverter sub open ended.

Wiper Balls

- For plug setting using the balanced plug method, foam wiper balls should be pumped through the drillstring while circulating after pulling above the cement plug to clean the drillpipe.
- Using wiper balls will help prevent "cement rings" in tool joints that can cause severe problems later (such as debris in MWD tools).

Cement Design

- Consider a 10% OH excess for cement volume calculations.
- Consider a maximum plug length of 500-700 ft.
- For plug cement slurries, fluid loss control is not necessary when setting a kickoff plug unless the plug is being set in an air-drilled hole where mud filter cake has not been deposited.
- Free water for a kickoff plug should be less than 1.0 %. For deviated wells (> 30 deg. angle), the free water should be 0.0 %.
- Design all the slurries with a shutdown of 45 minutes to give enough time to pull the cementing string out of the cement plug.
- Kick-off plug density to be at least **17.5 ppg**.

Spacers

- At least 0.5 ppg higher density than the mud weight.
- At least 0.5 ppg lower density than the cement slurry density.
- The spacer volume for setting plugs should yield a minimum fluid height of 500 feet in the drillpipe annulus.

Cement Equipment

- Optional use of batch mixer for lower and middle plugs.
- Mandatory use of batch mixer for kick-off plug.

WOC and Plug Drillout

- **WOC 24 hrs** until achieving 4700 psi Compressive Strength before attempting to drill out.

Procedure:

NOTE: Always review the COA document from BLM or NMOCD to ensure the pilot plug procedure complies with regulatory requirements.

Cement Plug Program:

Plug #	Plug top	Plug Bottom	Height (ft)	% Excess	Wt. lb/gal	Volume	Slurry Description and Cement Type
1	9937'	10566'	629	15	15.6	240sks/51bbls	Class H Cement
2	9400'	9937'	537	45	15.6	260sks/55bbls	Class H Cement
3 KO	8800'	9400'	600	15	17.5	285sks/49bbls	Densified Class H Cement

1) Make up 1000' of 2-7/8" (L80) tubing and run in hole to 10,566' MD (planned bottom of first plug). Fill pipe and break circulation as necessary.
    a. Exercise caution at the departure point at ~9937' MD and attempt to orient the stinger into the original wellbore
    b. If tag up occurs, POOH back to the departure point and reorient the stinger and attempt to run to bottom.

2) Hold PJSM w/ cementing company, H&P and Oxy personnel.
    - R/U cementing equipment, fill cement lines with fresh water and test to 5,000 psi.

3) Circulate and condition wellbore w/ rig pumps in preparation for cement **plug #1**:
    - Gradually stage pumps up to 500-550 gpm (8 ½" hole).
    - Monitor returns for H2S or gas and ensure that well is stabilized (no losses or flow).
    - Reciprocate pipe to help condition wellbore and rotate at 20-80 rpm.
    - Circulate a minimum of 2 bottoms up.

4) Pump 629' cement **plug #1** from 10566' to 9937' MD as follows:
    - Pre-mix cement volume (consider using a batch mixer).
    - Pump spacer ahead @ 4-6 bpm; drop wiper ball via ball dropping manifold.
    - Pump **15.6 ppg** slurry @ 4-6 bpm; drop wiper ball via ball dropping manifold.
    - Pump spacer behind @ 4-6 bpm.
    - Displace with drilling fluid @ 4-6 bpm.
        - under displace ~3 bbl.

5) TOOH 2 stands above planned TOC at a maximum speed of 30 fpm. Don't rotate out.

6) Circulate and condition wellbore w/ rig pumps in preparation for cement **plug #2**:
    - Gradually stage pumps up to 500-550 gpm (8 ½" hole).
    - Monitor returns for H2S or gas and ensure that well is stabilized (no losses or flow).
    - Reciprocate pipe to help condition wellbore and rotate at 20-80 rpm.

- Circulate a minimum of 2 bottoms up.
- Wash down to planned bottom of next plug.

7) Pump 537' cement **plug #2** from 9937' to 9400' MD as follows:
   - Note this volume includes additional excess to take into account the 151' sidetrack
   - Pre-mix cement volume (consider using a batch mixer).
   - Pump spacer ahead @ 4-6 bpm; drop wiper ball via ball dropping manifold.
   - Pump **15.6 ppg** slurry @ 4-6 bpm; drop wiper ball via ball dropping manifold.
   - Pump spacer behind @ 4-6 bpm.
   - Displace with drilling fluid @ 4-6 bpm.
     - under displace ~3 bbl.

8) TOOH 2 stands above planned TOC at a maximum speed of 30 fpm. Don't rotate out.

9) Circulate and condition wellbore w/ rig pumps in preparation for cement **kick-off plug**:
   - Gradually stage pumps up to 500-550 gpm (8 ½" hole).
   - Monitor returns for H2S or gas and ensure that well is stabilized (no losses or flow).
   - Reciprocate pipe to help condition wellbore and rotate at 20-80 rpm.
   - Circulate a minimum of 2 bottoms up.
   - Wash down to planned bottom of kick-off plug.

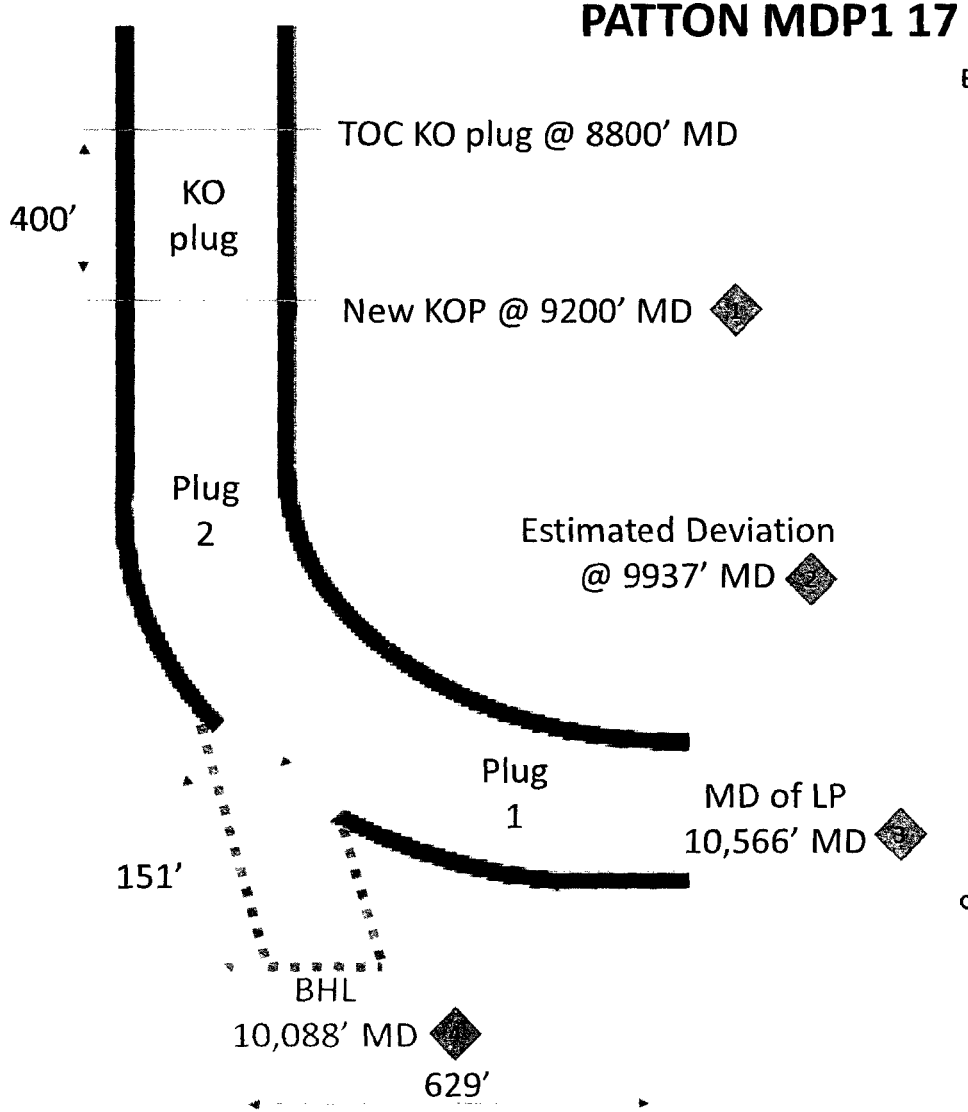
10) Pump 600' cement **Kick Off plug** from 9400' to 8800' MD as follows:
   - Pre-mix cement volume using a batch mixer.
   - Pump 50 bbls of MudFlush (surfactant loaded spacer)
   - Pump spacer ahead @ 4-6 bpm; drop wiper ball via ball dropping manifold.
   - Pump **17.5 ppg** slurry @ 4-6 bpm; drop wiper ball via ball dropping manifold.
   - Pump spacer behind @ 4-6 bpm.
   - Displace with drilling fluid @ 4-6 bpm.
     - under displace ~3 bbl.

11) TOOH 10 stands at a maximum speed of 30 fpm. **Don't rotate out.**

12) Circulate long way round and condition wellbore with rig pump.
   - Gradually stage pumps up to 500-550 gpm (8 ½" hole).
   - Drop 2 foam balls.
   - Reciprocate pipe (full stand) to help condition wellbore and rotate at 20-80 rpm.
   - Monitor returns closely for losses/gains and excess cement.
   - Circulate a minimum of 2 bottoms up.
   - TOOH to surface.

13) **WOC 24 hrs** until achieving 4700 psi Compressive Strength before attempting to drill out.
   - Make up KO BHA will WOC.
   - If the cement plug drills soft, pull out of plug a safe distance (approximately 500'), circulate, and wait-on-cement to gain more strength.
   - If the cement plug drills hard and soft, this is indication that the cement plug has fallen and become contaminated.

PATTON MDP1 17 FEDERAL 2H - ACTUAL



Brushy Canyon 6547'
Bone Spring 8149'

BS1 Sand 9117'

BS2 Carb 9429'

BS2 9807'

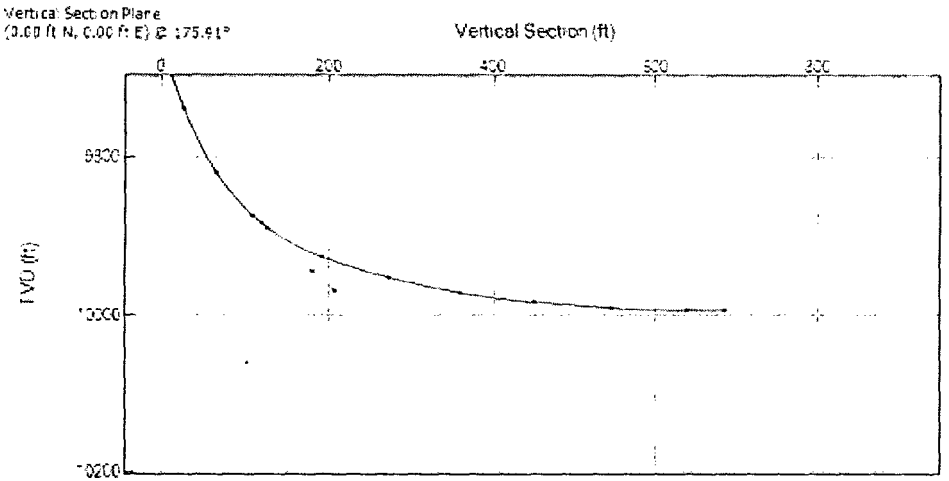
Surveys

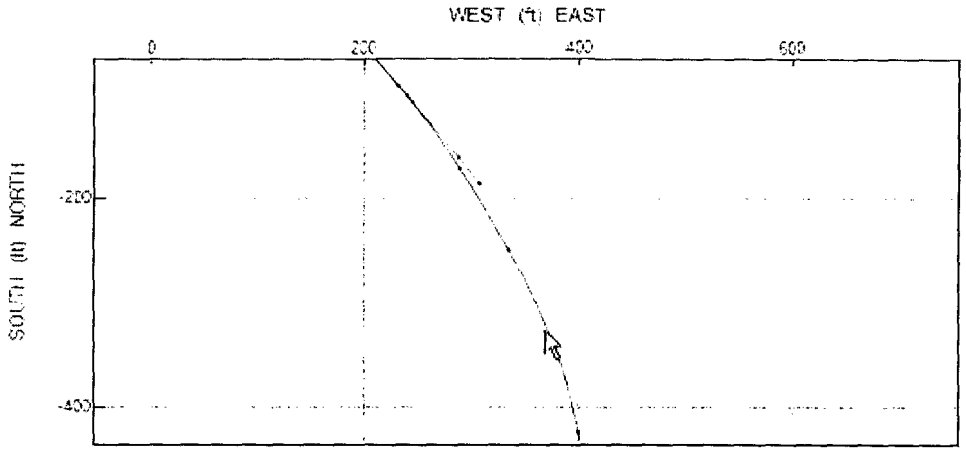
1. New KOP @ ~2.6° Inc & 85° Azim
2. Estim Dev @ 51.9° Inc & 142° Azim
3. LP 10,566' MD @ 90.3° & 188° Azim
4. Dev BHL @ 52.5° Inc & 143° Azim

Cement Plug Program:

Plug #	Plug top	Plug Bottom	Height (ft)	% Excess	Wt. lb/gal	Volume	Slurry Description and Cement Type
1	9937'	10566'	629	15	15.6	240sks/51bbls	Class H Cement
2	9400'	9937'	537	45	15.6	260sks/55bbls	Class H Cement
3 KO	8800'	9400'	600	15	17.5	285sks/49bbls	Densified Class H Cement

PATTON MDP1 17 FEDERAL 2H - ACTUAL





Schlumberger

OXY

Borehole: ST02 | **Well:** Oxy Patton MDP1 17 Federal 2H | **Field:** NM Eddy County (NAD 83) | **Structure:** Oxy Patton MDP1 17 Federal 2H

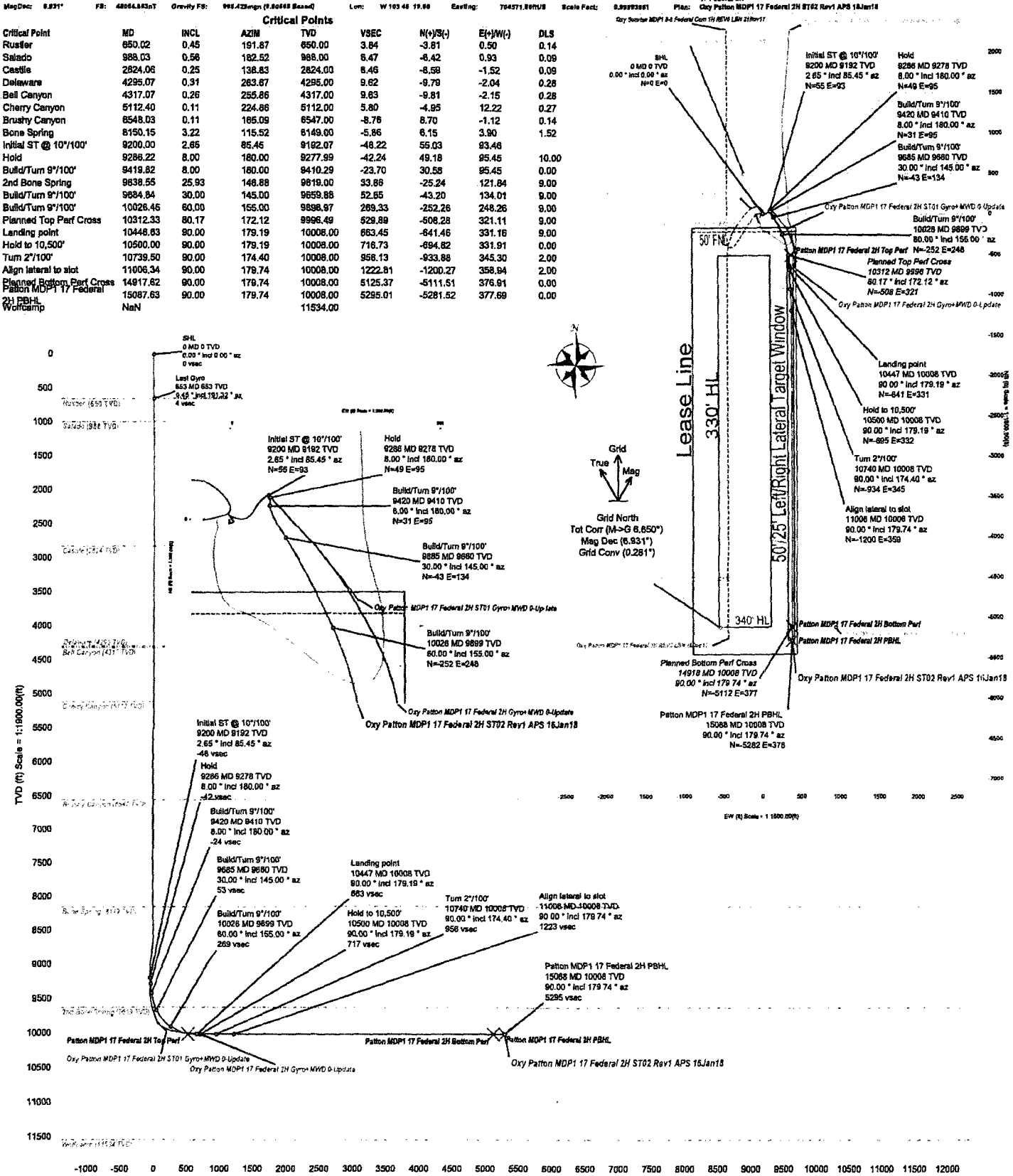
Gravity & Magnetic Parameters
Model: HDGM 2017 Dip: 59.962° Date: 16-Jan-2018
MagDec: 6.931° FS: 48064.853nT Gravity FS: 998.423mgn (9.80665 Based)

Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet
Lat: N 32 13 30.32 Northing: 446911.76ftUS Grid Conv: 0.281°
Lon: W 103 48 19.66 Easting: 704571.56ftUS Scale Fact: 0.99993881

Miscellaneous
Slot: Oxy Patton MDP1 17 Federal 2H TVD Ref: RKB=26.5'(3565.9ft above MSL)
Plan: Oxy Patton MDP1 17 Federal 2H ST02 Rev1 APS 16Jan18

Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
Rustler	650.02	0.45	191.87	650.00	3.84	-3.81	0.50	0.14
Salado	988.03	0.56	182.52	988.00	6.47	-6.42	0.93	0.09
Castile	2824.06	0.25	138.83	2824.00	8.46	-8.58	-1.52	0.09
Delaware	4295.07	0.31	263.67	4295.00	9.62	-9.79	-2.04	0.28
Bell Canyon	4317.07	0.26	255.86	4317.00	9.63	-9.81	-2.15	0.28
Cherry Canyon	5112.40	0.11	224.86	5112.00	5.80	-4.95	12.22	0.27
Brushy Canyon	6548.03	0.11	165.09	6547.00	-8.76	8.70	-1.12	0.14
Bone Spring	8150.15	3.22	115.52	8149.00	-5.86	6.15	3.90	1.52
Initial ST @ 10°/100'	9200.00	2.65	85.46	9192.07	-48.22	55.03	93.46	
Hold	9286.22	8.00	180.00	9277.99	-42.24	49.18	95.45	10.00
Build/Turn 9°/100'	9419.82	8.00	180.00	9410.29	-23.70	30.58	95.45	0.00
2nd Bone Spring	9638.55	25.93	146.88	9619.00	33.88	-25.24	121.84	9.00
Build/Turn 9°/100'	9684.84	30.00	145.00	9659.88	52.65	-43.20	134.01	9.00
Build/Turn 9°/100'	10026.45	60.00	155.00	9898.97	269.33	-252.26	248.26	9.00
Planned Top Perf Cross	10312.33	80.17	172.12	9996.49	529.89	-508.28	321.11	9.00
Landing point	10446.63	90.00	179.19	10008.00	663.45	-641.46	331.16	9.00
Hold to 10,500'	10500.00	90.00	179.19	10008.00	716.73	-694.82	331.91	0.00
Turn 2°/100'	10739.50	90.00	174.40	10008.00	956.13	-933.88	345.30	2.00
Align lateral to slot	11006.34	90.00	179.74	10008.00	1222.81	-1200.27	358.94	2.00
Planned Bottom Perf Cross	14917.62	90.00	179.74	10008.00	5125.37	-5111.51	376.91	0.00
Patton MDP1 17 Federal 2H PBHL	15087.63	90.00	179.74	10008.00	5295.01	-5281.52	377.69	0.00
Wolfcamp	NaN			11534.00				



Vertical Section (ft) Azim = 175.91° Scale = 1:1900.00(ft) Origin = 0N/-S, 0E/-W